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Safety Sciences, San Diego, CA

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The report contains summaries of the data analyses for the complete injury reporting period (December 1975 through September 1977 and the Field Test reporting period) including tabulations and injury rates. In addition to injury descriptions, their time lost and direct costs incurred, employee data, equipment data, hours of exposure data, and operational background data were collected and analyzed.

KEYWORDS: *Injuries, *Reporting, *Information systems, *Refuse disposal, *Data processing.

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Volume II: Data Analyses

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EVALUATION OF AN INJURY REPORTING AND INFORMATION SYSTEM (IRIS) FOR THE SOLID WASTE MANAGEMENT INDUSTRY

Final Report (Volume II): Data Analyses

*This report (SW-169c.2) describes work performed
for the Office of Solid Waste under contract no. 68-03-0231
and is reproduced in three volumes as received from the contractor.
Volume I describes the background and development of IRIS,
volume II contains summaries of the data analyses,
and volume III lists the IRIS publications.
The findings should be attributed to the contractor
and not to the Office of Solid Waste.*

U.S. ENVIRONMENTAL PROTECTION AGENCY

1979

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An environmental protection publication (SW-169c.2) in the solid waste management series.

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I. INTRODUCTION

This Data Analyses volume is submitted in conjunction with the Final Report on the continuation of Contract No. 68-03-0231, "Full Scale Operational and Use of an Injury Reporting and Analysis System for the Solid Waste Management Industry". This volume contains summaries of the data analyses for the complete IRIS injury reporting period (December 1975 through September 1977 and the Field Test reporting period), including tabulations and injury rates.

The large data base compiled on solid waste collection and disposal injuries through solid waste organizations reporting detailed descriptions of the accidents to IRIS is a valuable tool in understanding accident causation in the solid waste industry. In addition to injury descriptions, their time lost and direct costs incurred, employee data, equipment data, hours of exposure data, and operational background data were also collected. Over 12,000 injuries, 60 thousand days lost and $3.5 million in direct costs were collected, and the IRIS users represented 40 million hours of exposure for the entire time period.

Over 80 data analysis programs were developed during this contract period and further analyses with the present data have been identified in Section 3.1.1 of the Final Report. The development of the data analysis programs underwent an iterative process in which the individual programs as well as the overall flexibility and thoroughness of analyses that the programs represented were continually being evaluated and improved. In fact, the possible data analyses are unlimited with the present system upon the development of the "master" program, which can access any piece of injury, employee or equipment data on file in the computer. (See Section 2.3 of the Final Report for discussion of computer programs development.)

Computer data analyses were of two types, tabular by accident description factor (e.g., accident type, activity, etc.) and injury rate comparisons of the IRIS users by various operational, accident description, equipment, and employee factors (e.g., OSHA incidence rates by age groups). Both types of data analyses are available at single and multiple factor levels. Some of the factors that can be analyzed by single and multiple factors are:

- activity
- accident type
- nature of injury
- part of body
- crew type
- crew size
- point of collection
- type of shift
- individual personal protective equipment
- type of equipment

- day of week
- time of day
- hours worked prior
- accident site
- division
- district
- job classification
- age
- education
- experience
- height
- weight
- weather conditions
- surface conditions
- environmental conditions

Most of the listed factors have already been analyzed in the IRIS publications and/or in this volume by means of tabulations and injury rates on a single factor basis as well as multiple factor cross analyses. Recognizing that this list is only partial and that multiple factor analyses can be performed with the data, it is apparent that unlimited data analyses is available.

The criteria for the development of the data analysis programs were based upon:

- User comparison programs. Programs that ranked users with similar operations from the highest to lowest injury rates (e.g., standard divisions, crew types).

- Developing injury rates by single or multiple factors for the entire data base. These programs were used to answer industry-wide safety questions (e.g., accident description factors, employee characteristics).

- Developing injury rates by single or multiple factors for individual users. The above programs were able to compute the injury rates for the entire data base or for specified users. These were used in the QSMR's.

- Developing a self-programmable data analysis program. Flexibility in choosing factors was sought in the development of the "master" program.

II. TABULAR DATA ANALYSES

Tabular data analyses, as opposed to injury rates analyses, do not require the computation of man-hours of exposure and instead compute numbers and percentages. The tabular data analysis programs compute numbers and percentages for the number of OSHA recordable injuries, days lost and direct costs. The tabular data analysis programs examine only accident description factors that do not necessarily require the exposure to the factor to be based. Single as well as multiple factors can be examined.

2.1 SINGLE FACTOR ANALYSES

Separate programs were written to analyze five accident description factors that were identified as being of interest: activity, accident type, accident site, nature of injury, and part of body. These factors contain a number of categories that range from 60 for the accident type categories to 35 for the part of body categories. In each printout, the categories of a factor are ranked from the highest to the lowest percent of OSHA recordable injuries, days lost or direct costs. FIGURE 1 lists the top three categories for the above five factors as shown by the IRIS data (reporting period December 1975 to September 1977). This chart is a standard feature of the quarterly Accident Trends report since it summarizes the accident trends in general terms. The actual printouts are shown as EXHIBITS

FIGURE 1

SUMMARY OF ACCIDENT FACTORS FOR SELECTED ACCIDENT
CHARACTERISTICS WITH HIGHEST PERCENT OF OSHA RECORDABLE INJURIES
OSHA DAYS LOST AND DIRECT COSTS
December 1975 - September 1977

Type of Characteristic	Factors with the:		
	Highest % of OSHA Recordable Injuries	Highest % of OSHA Days Lost	Highest % of Direct Costs
Activity	Lifting or dumping container - 38% Getting off equipment - 8% Standing or walking - 7%	Lifting or dumping container - 33% Getting off equipment - 10% Riding on equipment - 8%	Lifting or dumping container - 30% Getting off equipment - 8% Standing or walking - 8%
Accident Type	Overexertion involving container - 18% Slip on same level - 6% Struck by waste - 5%	Overexertion involving container - 23% Vehicle accident - 8% Fall to a different level - 7%	Overexertion involving container - 21% Vehicle accident - 8% Caught between objects - 8%
Accident Site	On collection route at back of truck - 34% On collection route at curb - 16% On collection route in customer's yard - 11%	On collection route at back of truck - 30% On collection route at curb - 16% On collection route in customer's yard - 9%	On collection route at back of truck - 29% On collection route at curb - 15% On collection route in customer's yard - 8%
Nature of Injury	Sprain or strain - 41% Bruise - 20% Cut or puncture - 18%	Sprain or strain - 54% Bruise - 14% Fracture - 11%	Sprain or strain - 49% Bruise - 13% Fracture - 10%
Part of Body	Back - 20% Leg - 8% Eyes - 8%	Back - 32% Leg - 7% Ankle - 7%	Back - 30% Multiple body parts - 9% Leg - 8%

at the end of this volume, and each factor section has the appropriate EXHIBIT numbers indexed.

2.1.1 Activity (EXHIBITS 1A-C)

The activity is the specific task the employee was performing at the time of injury. It is particularly useful in identifying employee training needs. For instance, the highest activity category group in injury frequency was "lifting and dumping containers" (38%). Therefore, several employee training areas require emphasis (e.g., testing the weight of the container, proper lifting techniques, and proper dumping techniques).

Further examination of other causal factors, however, require multiple factor analyses. For example, whether the employee overexerted himself, fell, or caught his hand between the container and hopper sill while he was lifting or dumping makes a difference as to which countermeasures (e.g., personal protective equipment, equipment modifications, etc.) should be emphasized.

One of the topics covered in an Accident Trends report was "container handling accidents" in which four countermeasures for it were discussed: employee training, container regulations, personal protective equipment, and operational changes (EXHIBIT 5 in Publications volume). In addition, container handling countermeasures, in particular: testing the container, proper lifting techniques and proper dumping techniques, were also stressed in the Special Report on back strains (EXHIBIT 22 in Publications volume).

2.1.2 Accident Type (EXHIBITS 2A-C)

The accident type is the event which "caused" the injury, rather than which directly resulted in the injury. The accident type categories were designed to show cause. Therefore, several categories show a sequence of accident types such as "slipped and struck against vehicle part", "vehicle went over bump, and employee fell off step", or "made sudden movement in avoiding falling container". Sequential accident types were particularly important for the vehicle accidents, since if the employee struck against the cab door resulting in a sprained shoulder from a vehicle collision, the accident type that directly resulted in his injury would be "struck against". The coded accident would, therefore, have provided a totally different picture of what occurred.

To achieve further specification in the accident type categories, the source of injury was also linked to the accident type categories where applicable (e.g., overexertion involving container, struck against vehicle part). Four general source categories were designated: container, vehicle part, object and waste. Over 60 accident type categories were identified.

The top three accident type categories in injury frequency were:

- overexertion involving container - 18%
- slip on same level - 6%
- struck by waste - 5%

Overexertions, as defined by the American National Standard (ANSI Z16.2-1962) "Method of Recording Basic Facts Relating to the Nature and Occurrence of Work Injuries", are "nonimpact cases in which the injury resulted from excessive physical effort, as in lifting, pulling, pushing, wielding or throwing the source of injury". Overexertions are of major concern in this industry because they frequently result in back strains, which often incurs days lost and direct costs. EXHIBIT 2A indicates that the total percentage of overexertions was 21%, and 18% of the 21% were overexertions involving containers. They also resulted in 30% of the days lost and 28% of the direct costs. Overexertions were frequently discussed in the IRIS reports, and one of the Special Reports examines the back strains from overexertion for the employee characteristics of age and experience.

Slips and falls resulted in another 20% of the solid waste injuries, in 28% of the days lost, and 25% of the direct costs for the entire reporting period. These accidents were the topic of the second quarter 1977 Accident Trends report (EXHIBIT 7 in Publications volume). They were examined for seasonal variations, for hazardous surface conditions, for injury rates by various collection types, and for the injuries they caused. However, of the twelve categories of slips and falls, "slip on same level" was the most frequent:

- slip on same level - 5.6%
- fall on same level - 5.1%
- fall to a different level - 4.0%
- slip and struck against vehicle part - 2.3%
- slip to a different level - 1.2%
- fall against vehicle part - .9%
- fall against container - .3%
- slip and struck against object - .2%
- slip and struck against container - .2%
- fall against object - .2%
- fall against waste - <.1%
- slip and struck against waste - <.1%

Struck by waste, the third most frequent accident type (5%) mostly involved waste being ejected from the hopper. Although it did not result in high days lost (<2%) or direct costs (2%), it still indicates that employees are working in front of the operating packer panel, which may lead to severe amputations and fractures if they attempt to push back falling waste. In addition, the possibility of a serious eye injury also exists, as many employees are not required to wear eye protection around the hopper. Repeated discussions of this injury problem area have taken place in the IRIS reports.

2.1.3 Accident Site (EXHIBITS 3A-C)

The three most frequent accident sites for solid waste collection injuries were:

On Collection Route	% No. Inj.	% Days Lost	% Direct Costs
At back of truck	34%	30%	29%
At curb	16	16	15
In customer's yard	11	9	8

"At back of truck" injuries correspond closely to the high activity category of "lifting and dumping container", since the employees are dumping into the hopper at the back of rear-end loaders. Accidents that can occur at the back of the truck include slips and falls, overexertions, struck by objects ejected, catching hands between the container and hopper sill, dropping the container on one's foot, etc.

The accidents that occur at the curb are mostly slips and falls and container handling accidents (e.g., overexertion, hurt by handling, struck self with container, etc.). Curbside collection should have more accidents at this site.

For backyard collection, accidents can occur in the customer's yard as the employees are pushing or carrying their intermediate containers (e.g., carrying tubs, wheeled carts, etc.). Slips and falls as well as container handling accidents occur in the customer's yard.

2.1.4 Injury Type (EXHIBITS 4A-C)

Not surprisingly, "sprain/strains were the most frequent nature of injury (41%) and the next five categories in decreasing frequencies were:

- bruise - 20%
- cut/puncture - 18%
- irritation to eyes - 5%
- sting - 3%
- fracture - 3%

Bruises were often the result of falls, striking against the vehicle, and being struck by objects ejected or containers slipping from the employee's hands. Cuts and punctures occurred usually from glass penetrating the employee's pantlegs or gloves when handling plastic bags. They also resulted from stepping on nails and glass, or from dog bites. Windblown objects, objects ejected from the operating packer panel, or dust stirred up from [illegible] the containers caused eye irritations. Fractures, however, were more diversified in causes. They resulted from falls, being caught in the packer, being caught between the container and hopper sill, being struck by a vehicle, or from dropping a full container on the foot, to name a few accident types.

2.1.5 Part of Body (EXHIBIT 5)

Because of the large percentage of "sprain/strains", the most frequent body part being injured was the back (20%). The legs and eyes were close in frequency (8%) but had far less injuries than backs. The injuries to the legs occurred often from cuts and punctures due to glass in the plastic bags being handled. The injuries to the eyes, again, were due to objects being ejected from the hopper or waste particles being wind carried or disturbed when dumped.

2.2 MULTIPLE FACTOR ANALYSES

From the previous discussion of the single factor analyses, it should be noted that the relationship of the factor being analyzed to any other factor was mostly "guesswork" from having reviewed the actual narrative descriptions given over the phone. Therefore, multiple factor analyses are necessary to recognize causal factor relationships to use in developing effective countermeasures. Towards this end, the "master" program was conceived and developed over a two year period.

2.2.1 "Master" Program

The need for a versatile program that could tabulate any given combination of injury, employee, and equipment factors was recognized during the Field Test when the only multiple factor analysis available was very rigidly structured to include only certain injury description factors in a particular sequence. In order to alter anything in the printout, the program had to be rewritten. In addition, the Field Test program did not utilize the employee or equipment data.

These deficiencies were eliminated in the development of the "master" program which is self-programmable. (See

SECTION 2.3.3 in the Final Report volume for a discussion of who the program works.) It is used to:

- provide routine "profiles", or sentence descriptions, of the injuries for the QSMR's. A detailed, eight factor profile printout of each user's injuries for the quarter is a standard feature of Section I of the QSMR (FIGURE 2). Because eight factors are being sorted, with corresponding codes of at least 30 per factor, the detailed descriptions do not group very well. Therefore, to aid in analyzing a large user's injuries, their injuries may be grouped for the more common activities or accident types (e.g., a detailed profile printout may be requested for a large user's overexertion accidents which can be examined for causal factors such as "overweight container".)

- develop task/hazard analysis charts for the Accident Trends reports as well as for other special topics for the IRIS News or Special Reports. FIGURE 3 is an example of a task/hazard analysis performed for container handling injuries for the fourth quarter 1976 Accident Trends report (EXHIBIT 5 in the Publications volume). Other task/hazard analysis charts developed include:

    - equipment related accidents in third quarter 1976 Accident Trends report (EXHIBIT 4 in Publications volume)
    - relating equipment modifications and the ANSI Z245.1-1975 standards to equipment related accidents in the IRIS News, July 1977 (EXHIBIT 18 in Publications volume)
    - relating overexertion accidents to countermeasures in the IRIS News, July 1977 (EXHIBIT 18 in Publications volume)
    - relating back strains from overexertion to countermeasures for a Special Report (EXHIBIT 22 in Publications volume)
    - slips and falls in the collection division in second quarter 1977 Accident Trends report (EXHIBIT 7 in Publications volume)

USER NO. 125
DETAILED DESCRIPTION OF
FIRST QUARTER ACCCIDENTS

REPORTING PERIOD: JANUARY - MARCH 1977

INSTRUCTIONS: EXAMINE THIS DATA TO DETERMINE THE CHARACTERISTICS OF YOUR ORGANIZATION'S FIRST QUARTER ACCCIDENTS. THIS PROFILE IS A FORMATTED SENTENCE CONSISTING OF ACCIDENT TYPE, ACTIVITY, NATURE OF INJURY AND PART OF BODY.

PROFILE	NO. INJ	DAYS	COSTS
EMPLOYEE OVEREXERTED SELF WITH STD MTL CONT WHICH WAS HVY (YARD CLIPPINGS) WHILE LIFTING STD MTL CONT RESULTING IN SPRAIN OR STRAIN TO BACK .	1	20	603
EMPLOYEE FELL ON CHAIR IN STEPPING UP WHILE GETTING ON STEP OF VEH RESULTING IN SPRAIN OR STRAIN TO ANKLE .	1	40	1030
EMPLOYEE WAS STRUCK BY UNKNOWN WASTE WHICH FELL OUT OF TOP OF CONT WHILE LIFTING TO DUMP NSTD MTL CONT RESULTING IN DERMATITIS TO LEG .	1	0	15
EMPLOYEE VEH WAS HIT BY ANOTHER VEH AND HE STRUCK AGNST VEH WHILE DRIVING RESULTING IN BRUISE TO MULTIPLE BODY PARTS .	2	70	1731
EMPLOYEE STEPPED ON NAIL WHILE GETTING OFF VEHICLE RESULTING IN CUT/PUNCTURE TO FOOT .	1	0	0
EMPLOYEE SLIPPED STEPPING ON DEPRESSION WHILE STANDING OR WALKING RESULTING IN SPRAIN OR STRAIN TO ANKLE .	1	19	568
EMPLOYEE STEPPED ON GLASS WHILE OPENING TAILGATE RESULTING IN CUT/PUNCTURE TO FOOT .	1	3	90
EMPLOYEE WAS INJURED WHEN VEH WENT OVER BUMP OR DEPRESSION AND HE STRUCK AGNST VEH WHILE GETTING ON STEP OF VEH RESULTING IN BRUISE TO LEG .	1	0	72
EMPLOYEE STRUCK SELF WITH PLASTIC BAG WHICH HAD PROTRUDING WASTE AND HNDLD WITH COWRKR WHILE LIFTING TO DUMP PLASTIC BAG RESULTING IN CUT/PUNCTURE TO LEG .	1	6	116
EMPLOYEE STRUCK AGAINST STEP OF VEH WHILE DUMPING STD MTL CONT RESULTING IN BRUISE TO KNEE .	1	1	76
EMPLOYEE WAS HURT BY HANDLING PLASTIC BAG WHICH HAD PROTRUDING GLASS WHILE LIFTING TO DUMP PLASTIC BAG RESULTING IN CUT/PUNCTURE TO ARM .	1	8	162
EMPLOYEE MADE SUDDEN MOVEMENT IN STEPPING DOWN WHILE GETTING OFF VEHICLE RESULTING IN SPRAIN OR STRAIN TO KNEE .	1	26	1195
EMPLOYEE WAS STRUCK BY SHARP OBJ WHICH FELL OUT OF TOP OF CONT WHILE DUMPING STD MTL CONT RESULTING IN CUT/PUNCTURE TO FINGERS .	1	5	117
EMPLOYEE SLIPPED WHILE ON GROUND AND STRK AGNST BOARD W NAIL WHILE STANDING OR WALKING RESULTING IN CUT/PUNCTURE TO FOOT .	1	5	221
EMPLOYEE FELL WHILE ON WET STEP OF VEH AND STRK AGNST STEP OF VEH WHILE GETTING ON STEP OF VEH RESULTING IN BRUISE TO LEG .	1	2	78
EMPLOYEE OVEREXERTED SELF WITH STD MTL CONT WHICH WAS UNUSUALLY HEAVY WHILE LIFTING STD MTL CONT RESULTING IN SPRAIN OR STRAIN TO BACK .	4	44	1644
EMPLOYEE FELL WHILE ON OILY RUNNING BOARD AND STRK AGNST RUNNING BOARD WHILE GETTING OFF RUNNING BOARD RESULTING IN BRUISE TO BACK .	1	14	515
EMPLOYEE OVEREXERTED SELF WITH STD MTL CONT WHICH WAS UNUSUALLY HEAVY WHILE LIFTING STD MTL CONT RESULTING IN SPRAIN OR STRAIN TO GROIN .	1	7	180
EMPLOYEE STRUCK SELF WITH UNBUNDLED SHRUBBERY WHICH HAD SLIPPED FROM HIS HANDS WHILE LIFTING UNBUNDLED SHRUBBERY RESULTING IN BRUISE TO FINGERS .	1	11	348
EMPLOYEE WAS HURT BY HANDLING PLASTIC BAG WHICH HAD PROTRUDING WASTE WHILE LIFTING TO DUMP PLASTIC BAG RESULTING IN CUT/PUNCTURE TO FINGERS .	1	0	60
EMPLOYEE VEH WAS HIT BY ANOTHER VEH AND HE FELL WHILE RIDING ON STEP OF VEH RESULTING IN BRUISE TO BACK .	1	6	326
EMPLOYEE VEH WAS HIT BY ANOTHER VEH AND HE STRUCK AGNST VEH WHILE DRIVING RESULTING IN BRUISE TO BACK .	1	2	191
EMPLOYEE VEH WAS HIT BY ANOTHER VEH AND HE FELL WHILE RIDING ON STEP OF VEH RESULTING IN BRUISE TO CHEST .	1	10	416
EMPLOYEE FELL FROM RUNNING BOARD ONTO PAVEMENT WHILE GETTING OFF RUNNING BOARD RESULTING IN CUT/PUNCTURE TO SCALP .	1	10	539
EMPLOYEE GOT WASTE PARTICLES IN EYE WHILE DOING OTHER TYPE OF ACTIVITY RESULTING IN EYE IRRITATION TO CHEEK .	1	1	60

FIGURE 3

CONTAINER RELATED ACCIDENTS*
PRELIMINARY TASK/HAZARD ANALYSIS

TASK			HAZARDS				POSSIBLE COUNTERMEASURES			
Percent of Total				Percent of Task			EMPLOYEE TRAINING	PROTECTIVE CLOTHING	CONTAINER REGULATIONS	OPERATIONAL CHANGES
% No. Inj.	% Days Lost	% Direct Costs		% No. Inj.	% Days Lost	% Direct Costs				
1. LIFTING CONTAINER 14%	14%	13%	a. Overexertion	65%	67%	.70%	Proper lifting techniques			Change to mechanical or semi-mechanical collection
% of Cont. Accidents 29%	29%	32%	(1) Heavy Container**	49%	54%	54%	Test weight. Tag and leave heavy containers Ask aid of coworker. Train on proper lifting techniques and team lifting.		Container weight limits Public acceptance program.	Same as above.
			(2) Large Container (tote barrel, cart, etc.)**	11%	10%	10%	Do not overfill intermediate container. If heavy, obtain aid. Train on proper lifting techniques and team lifting.		Container size limits.	Change from backyard to curbside or to mechanical or semi-mechanical collection
			(3) Interaction**	2%	3%	2%	Team lifting coordination			Change to mechanical or semi-mechanical collection.
			b. Slipped or fell on wet, icy, or oily surface	3%	2%	2%	Proper foot placement.	Slip resistant, high ankled safety shoes.		Same as above.
			c. Cut hand on rough edges of cans or objects protruding from container	8%	15%	9%		Gloves	Not allow containers with ragged edges. Require plastic bags to be of a certain thickness.	Same as above.

---

* IRIS reporting period was December 1975 to December 1976. It includes 3,763 OSHA recordable injuries, 30,258 days lost and $1,563,888 in direct costs. Of these figures, 1,868 OSHA recordable injuries, 14,111 days lost and $638,481 in direct costs were incurred as employees were handling containers

** Overlapping numbers

CONTAINER RELATED ACCIDENTS

PRELIMINARY TASK/HAZARD ANALYSIS

TASK				HAZARDS				POSSIBLE COUNTERMEASURES			
	Percent of Total				Percent of Task			EMPLOYEE TRAINING	PROTECTIVE CLOTHING	CONTAINER REGULATIONS	OPERATIONAL CHANGES
	% No. Inj.	% Days Lost	% Direct Costs		% No. Inj.	% Days Lost	% Direct Costs				
1. LIFTING CONTAINER continued				d. Struck self with container or objects protruding from plastic bags	6%	5%	6%	Proper lifting techniques.	Leather apron or chaps to protect legs.	Require separate handling of glass and other sharp wastes.	Change to mechanical or semi-mechanical collection.
				e. Dropped can on foot	2%	1%	2%	Proper lifting techniques.	Steel-toed safety shoes. Slip resistant gloves.		Same as above.
2. DUMPING CONTAINER	11%	9%	8%	a. Overexertion	23%	41%	43%	Proper dumping technique.			Same as above.
% of Cont. Accidents				(1) Heavy Container**	10%	14%	14%	Proper dumping technique.		Container weight limits.	Same as above.
	23%	19%	18%	(2) Large Container**	4%	5%	6%	Do not overfill intermediate containers.		Container size limits.	Same as above.
				b. Object in eye (not ejected)	15%	1%	4%	Avert head while dumping.	Eye protection.		
				c. Caught hand between container and vehicle	10%	11%	7%	Proper dumping technique.	Gloves.		Same as above.
				d. Struck by waste falling from container or hopper	8%	8%	9%	Do not overfill hopper. Do not raise container too high.	Gloves. Safety shoes.		Same as above.

**Overlapping numbers

CONTAINER RELATED ACCIDENTS

PRELIMINARY TASK/HAZARD ANALYSIS

TASK				HAZARDS				POSSIBLE COUNTERMEASURES			
	Percent of Total				Percent of Task						
	% No. Inj.	% Days Lost	% Direct Costs		% No. Inj.	% Days Lost	% Direct Costs	EMPLOYEE TRAINING	PROTECTIVE CLOTHING	CONTAINER REGULATIONS	OPERATIONAL CHANGES
2. DUMPING CONTAINER continued				e. Struck against vehicle	7%	4%	5%	Proper dumping technique.			Change to mechanical or semi-mechanical collection.
				f. Struck by waste ejected from hopper	5%	1%	2%	Not being at back of truck while hopper is operating.	Eye protection.		
				g. Fell or slipped on wet, icy or oily surface	3%	3%	4%	Proper dumping technique.	Slip-resistant, high ankled safety shoes.		Same as above.
				h. Struck by container handled by coworker	2%	<1%	<1%	One employee dumps at a time.			Same as above.
				i. Hurt hand on protruding waste or rough edges of container	2%	<1%	<1%		Gloves.	Container condition regulations for rough edges. Separate handling of glass and other sharp waste.	Same as above.
				j. Struck by vehicle	2%	5%	5%	Do not overfill truck.			Same as above.
				k. Dropped container on foot	1%	2%	2%	Maintain firm grip on container.	Steel toed safety shoes. Slip resistant gloves.		Same as above.

CONTAINER RELATED ACCIDENTS

PRELIMINARY TASK/HAZARD ANALYSIS

TASK				HAZARDS				POSSIBLE COUNTERMEASURES			
	Percent of Total				Percent of Task						
	% No. Inj.	% Days Lost	% Direct Costs		% No. Inj.	% Days Lost	% Direct Costs	EMPLOYEE TRAINING	PROTECTIVE CLOTHING	CONTAINER REGULATIONS	OPERATIONAL CHANGES
3. LIFTING TO DUMP CONTAINER % of Cont. Accidents	10% 20%	10% 21%	8% 19%	a. Overexertion while handling heavy container	24%	40%	35%	Test weight prior to lifting. Tag and leave heavy containers. Train on proper lifting techniques. Obtain aid of coworker if heavy or awkward.		Container weight limits. Public acceptance campaign.	Change to mechanical or semi-mechanical collection.
				b. Overexertion while handling large container	3%	1%	1%	Do not overfill intermediate container. If heavy, obtain aid. Train on proper lifting techniques and team lifting.		Container size limits.	Change from backyard to curbside or to mechanical or semi-mechanical collection.
				c. Overexertion while handling multiple containers.	<1%	6%	4%	Not allowing.			Change to mechanical or semi-mechanical collection.
				d. Cut leg with glass or hypodermic needle protruding from plastic bag	11%	4%	5%	Not throwing plastic bags.	Leather apron or chaps to protect legs.	Require separate handling of glass and other sharp wastes.	Same as above.
				e. Struck against vehicle	6%	5%	6%	Proper lifting techniques.			Same as above.
				f. Cut hand on glass in plastic bag	6%	2%	2%		Gloves.	Same as above.	Same as above.

CONTAINER RELATED ACCIDENTS

PRELIMINARY TASK/HAZARD ANALYSIS

TASK				HAZARDS				POSSIBLE COUNTERMEASURES			
	Percent of Total				Percent of Task						
	% No. Inj.	% Days Lost	% Direct Costs		% No. Inj.	% Days Lost	% Direct Costs	EMPLOYEE TRAINING	PROTECTIVE CLOTHING	CONTAINER REGULATIONS	OPERATIONAL CHANGES
3. LIFTING TO DUMP CONTAINER continued				g. Twisting/turning**	5%	8%	11%	Proper lifting techniques			Same as above.
				h. Throwing plastic bags**	14%	14%	12%	Not allowing.			Same as above.
				i. Slipping or falling on wet, icy or oily surfaces	4%	8%	8%	Proper foot placement.	Slip resistant, high ankled safety shoes.		Same as above.
				j. Struck by object ejected from hopper	1%	1%	1%	Not allowing employees at back of truck while hopper is operating.	Eye protection.		Same as above.
				k. Dropped heavy container on leg or foot	<1%	2%	2%	Test weight. Tag and leave heavy containers.	Slip resistant gloves. Steel-toed safety shoes.	Container weight limits. Public acceptance campaign.	Same as above.
4. CARRYING CONTAINER	6%	7%	6%	a. Slipped or fell	40%	42%	43%	Routing. Proper carrying techniques.	Slip resistant, high ankled safety shoes.		Change from backyard to curbside with mechanical or semi-mechanical collection.
% of Cont. Accidents	13%	15%	14%	(1) While handling tote barrel**	13%	4%	3%	Do not overfill. Routing. Proper carrying techniques.	Same as above.		Change from tote barrels to wheeled carts or to mechanical or semi-mechanical collection at curbside

** Overlapping numbers

CONTAINER RELATED ACCIDENTS

PRELIMINARY TASK/HAZARD ANALYSIS

TASK	TASK	TASK	TASK	HAZARDS	HAZARDS	HAZARDS	HAZARDS	POSSIBLE COUNTERMEASURES	POSSIBLE COUNTERMEASURES	POSSIBLE COUNTERMEASURES	POSSIBLE COUNTERMEASURES
	Percent of Total				Percent of Task						
	% No. Inj.	% Days Lost	% Direct Costs		% No. Inj.	% Days Lost	% Direct Costs	EMPLOYEE TRAINING	PROTECTIVE CLOTHING	CONTAINER REGULATIONS	OPERATIONAL CHANGES
4. CARRYING CONTAINER continued				(2) On wet, icy or oily surfaces**	19%	22%	22%	Routing. Proper carrying techniques.	Slip resistant, high ankled safety shoes.		Change from backyard t curbside with mechanical or semi-mechanical collection.
				(3) On waste on ground**	9%	5%	6%	Routing. Clean spilled waste immediately. Proper carrying techniques.	Same as above.		Same as above.
				(4) On depression**	5%	4%	4%	Routing. Proper carrying techniques.	Same as above.		Same as above.
				(5) On inclined surface**	3%	8%	10%	Routing. Proper carrying techniques.	Same as above.		Same as above.
				(6) On uneven surface**	3%	4%	2%	Routing. Proper carrying techniques.	Same as above.		Same as above.
				b. Struck against vehicle	8%	3%	3%	Proper carrying techniques.			Same as above.
				c. Struck self with container	14%	5%	5%	Proper carrying techniques.			
				(1) Dropped container on self**	3%	1%	<1%	Maintain firm grip. Proper carrying techniques.	Steel toed safety shoes. Slip resistant gloves.		

** Overlapping numbers

CONTAINER RELATED ACCIDENTS

PRELIMINARY TASK/HAZARD ANALYSIS

TASK				HAZARDS				POSSIBLE COUNTERMEASURES			
	Percent of Total				Percent of Task						
	% No. Inj.	% Days Lost	% Direct Costs		% No. Inj.	% Days Lost	% Direct Costs	EMPLOYEE TRAINING	PROTECTIVE CLOTHING	CONTAINER REGULATIONS	OPERATIONAL CHANGES
4. CARRYING CONTAINER continued				(2) Protruding waste**	9%	3%	3%	Proper carrying techniques.	Leather aprons or chaps to protect legs.	Separate handling of glass and other sharp wastes.	
				d. Overexertion while handling heavy container	9%	12%	14%	Tag and leave heavy containers. Proper carrying techniques.		Container weight limits. Public acceptance campaign.	
				e. Struck by vehicle	3%	12%	14%	Collect from one side of the street at a time.	Traffic vests or other high visibility clothing.		Rule to collect from only one side of the street. Change to mechanical or semi-mechanical collection.
5. PUSHING OR PULLING CONTAINER				a. Bulk containers							
	4%	6%	5%	(1) Overexertion	24%	57%	56%	Handle with coworker.			Require two man operation.
% of Cont. Accidents	8%	13%	13%	(2) Overexertion while handling with coworker	4%	3%	4%	Team pushing/pulling training.			
				(3) Caught between container and wall or vehicle	11%	12%	10%	Push rather than pull to keep body away from pinch points.		Container accessibility regulations. Container location regulations-level surface requirement.	

** Overlapping numbers

CONTAINER RELATED ACCIDENTS

PRELIMINARY TASK/HAZARD ANALYSIS

TASK				HAZARDS				POSSIBLE COUNTERMEASURES			
	Percent of Total				Percent of Task						
	% No. Inj.	% Days Lost	% Direct Costs		% No. Inj.	% Days Lost	% Direct Costs	EMPLOYEE TRAINING	PROTECTIVE CLOTHING	CONTAINER REGULATIONS	OPERATIONAL CHANGES
5. PUSHING OR PULLING CONTAINER continued				(4) Rolled bulk container over foot	4%	4%	11%	Push rather than pull.	Steel toed safety shoes.		
				(5) Struck by bulk container lid	4%	1%	3%	Keep hands away from pinch points.			
				b. Wheeled cart							
				(1) Slipped or fell	17%	7%	7%	Routing.	Slip resistant, high ankled shoes.		Change to curbside collection or to mechanical or semi-mechanical collection.

- provide special tabulations of specific factor combinations as needed. For instance, IRIS users and other interested persons have requested specific data on the frequency of overexertions involving recessed containers, of injuries due to objects being ejected from the hopper, the incidence of knee injuries for backyard vs. curbside collection, etc. Without the availability of the "master" program, these data requests would have been costly to provide, since they would have required special programs to be written or time consuming hand tabulations to be performed. In addition, for the Accident Trends reports, each issue required the analysis of a large data base for special topics, and their analysis were aided with specific printouts that tabulated the data by single factors and simple multiple factor combinations. The Special Reports also used the "master" program to tabulate such items as the number of foot injuries that would have been preventable with safety shoes that had steel toes and puncture protection.

- testing hypotheses of injury causal factors. In examining the over 25 factors collected on the injuries, the employees, and the equipment, safety questions on the interrelationships of one factor to another were considered constantly. With the "master" program, they could be tested immediately without waiting on the writing of a special computer program. If the data appeared promising, it was used for an issue of the IRIS News or as the topic for an Accident Trends report.

III. COMPARATIVE INJURY RATES ANALYSES

In comparing the injury experience of one IRIS user with another or one factor category with another (e.g., crew sizes, height groups, curbside vs. backyard collection, etc.) the data has to be "based", or compared by means of equalizing the actual hours worked between the categories. Simply using the number of injuries does not make the data comparable. For instance, if one wanted to compare the injury record of one user's 200 man collection division that had 100 OSHA recordable injuries in one year with another organization whose 100 man division had 50 injuries, the numbers show that the first organization had twice as many injuries. The injury rates were actually the same for the two organizations, given that the employees worked the same number of hours in the year.

IRIS computes seven incidence, severity and direct cost rates. They are based on the OSHA method of computing rates, which uses the 200,000 hours constant. The 200,000 hours is conveniently approximately equal to 100 employees working full time for one year, and therefore an OSHA incidence rate of 33 can be easily identified as 33 out of 100 or one out of three employees being injured a year with a non-first aid injury (OSHA recordable injury).

The seven injury rates used in IRIS data analyses are computed in the following manner:

1. OSHA incidence rate =

$$\frac{\text{No. OSHA recordable injuries}}{\text{Total man-hours of exposure}} \times 200{,}000$$

2. OSHA lost workday cases rate =

$$\frac{\text{No. lost workday cases}}{\text{Total man-hours of exposure}} \times 200{,}000$$

3. OSHA severity rate =

$$\frac{\text{No. lost workdays}}{\text{Total man-hours of exposure}} \times 200{,}000$$

4. Average workdays lost per lost workday cases =

$$\frac{\text{No. lost workdays}}{\text{No. lost workday cases}}$$

5. Average direct cost per OSHA recordable injury =

$$\frac{\text{Total direct costs for OSHA recordable injuries}}{\text{No. OSHA recordable injuries}}$$

6. Average direct cost per lost workday case =

$$\frac{\text{Total direct costs for lost workday cases}}{\text{No. lost workday cases}}$$

7. Direct cost per man-year =

$$\frac{\text{Total direct costs for OSHA recordable injuries}}{\text{Total man-hours of exposure}} \times 2{,}000$$

The IRIS injury rates data for the solid waste industry can be compared with the Bureau of Labor Statistics data (1976) in FIGURE 4, since they also compute the injury rates for the private industry sector with the OSHA method. The Bureau of Labor Statistics, however, does not maintain injury rates for the solid waste industry. The injury rates can be interpreted in the following way:

FIGURE 4

COMPARISON OF IRIS PARTICIPANT DATA WITH BUREAU OF LABOR STATISTICS DATA

	IRIS Participant Data (December 1975-September 1977)	BLS (1976) Private Industry Sector
OSHA Incidence Rate	38	9.2
Lost Workday Cases Rate	23	3.5
OSHA Lost Workdays Rate (Severity)	287	60.5
Avg. Workdays Lost Per Lost Workday Case	12.62	17
Avg. Direct Costs Per OHSA Recordable Injury	$393	--
Avg. Direct Costs Per Lost Workday Case	$620	--
Avg. Direct Costs Per Man-Year	$151	--

1. OSHA incidence rate. Nearly two out of five solid waste industry employees are sustaining a non-first aid injury a year while the private industry sector's rate only indicate an average of one out of ten.

2. OSHA lost workday cases rate. Twenty-three out of the 38 OSHA recordable injuries per 100 employees per year (60%) resulted in lost time for the IRIS users, or nearly one out of four employees sustained a lost time injury during the year. The corresponding rate for the private industry sector was only one-seventh of the solid waste industry.

3. OSHA lost workdays or severity rate. It is a measure of how many workdays are lost per 100 full time employees per year. The severity rate of the IRIS users was 287, or the average IRIS user was losing 2.9 days per full time employee on the payroll per year due to on-the-job injuries. This rate, however, was nearly five times that of the private industry sector, which was only .6.

4. Average workdays lost per lost workday case. The average lost workday case for the IRIS users resulted in over 12 days lost while that of the private industry sector was 17. This is the only injury rate that is lower than the private industry sector. However, it is offset by the much higher incidence of lost workday cases for the solid waste industry.

5. Average direct cost per OSHA recordable injury. The average non-first aid injury cost $393 in direct costs. IRIS only collects the direct costs of injuries, which includes medical costs, Worker's Compensation payments, wage continuation payments (e.g., injury leave), disability benefits, and death benefits. Indirect costs such as supervisor's time and witness time are not included. The Bureau of Labor Statistics does not collect injury costs.

6. Average direct cost per lost workday case. The average lost workday case cost $620 in direct injury costs. They are inherently more costly than OSHA recordable injuries because of a more severe group of injuries that have the added costs of wage continuation payments.

7. Average direct cost per man-year. This injury cost rate can be most easily interpreted as the injury costs to an establishment per employee per year. It was $151 for the average IRIS user who was losing $151 per full time employee per year to on-the-job injury costs.

3.1 SINGLE FACTOR ANALYSES

The injury rates can be computed by the various accident description, employee and equipment factors listed in the Introduction. However, this section deals only with the single factor analyses of eleven factors for which specific computer programs were written:

- age
- experience
- height
- weight
- division
- standard job classification
- region
- crew size
- type of shift
- crew type
- point of collection

The majority of these have been presented in the IRIS publications, mainly the Accident Trends reports. However, the IRIS publications only analyzed the data for the available data at the time of writing and this volume analyzes the data for the complete time period. The Field Test data was not able to be computed for the man-hours of exposure and are not discussed in Section III. A comparison of its tabulated data, however, appears in Section IV.

3.1.1 Age (EXHIBITS 6A-C)

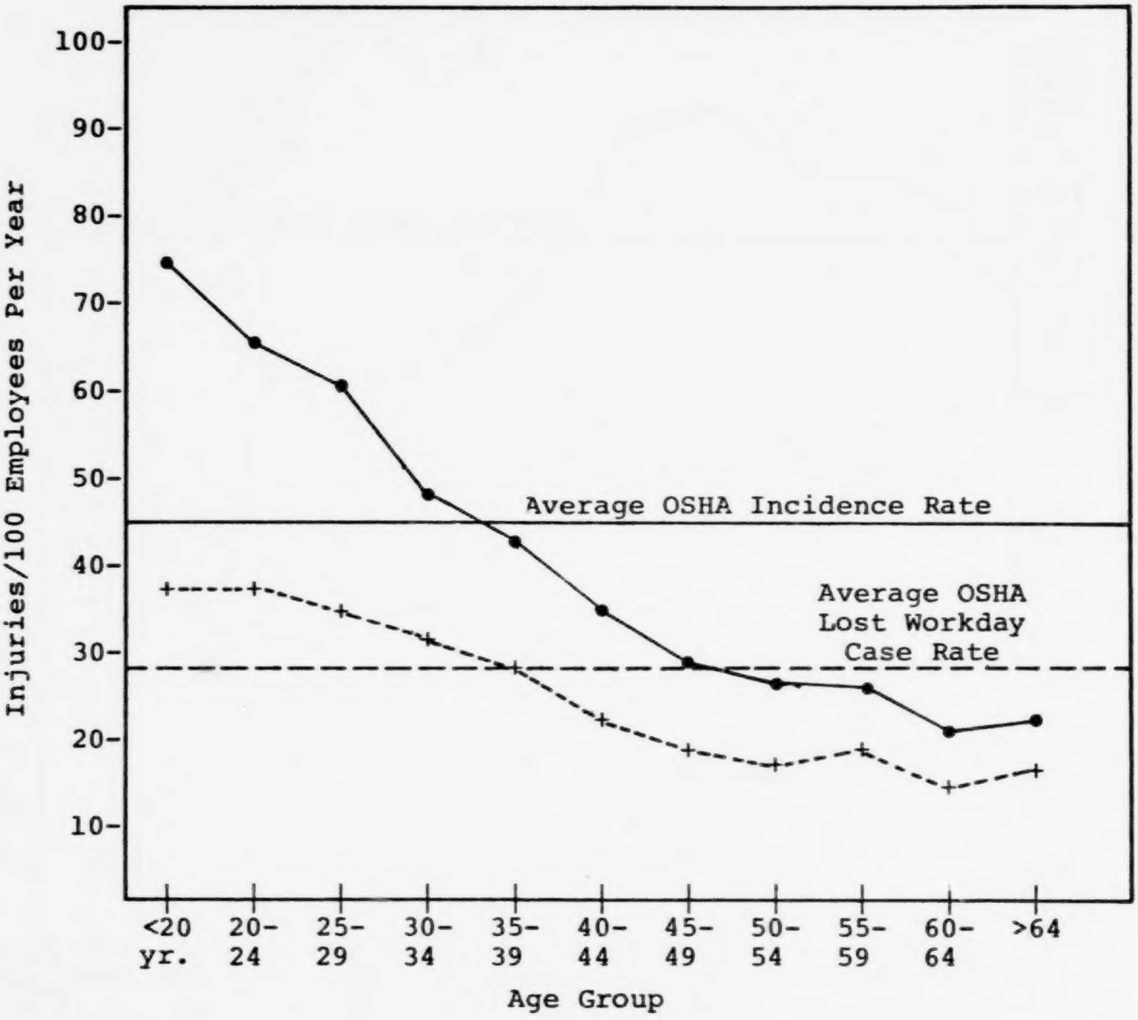
FIGURES 5-7 graph the four injury rates of OSHA incidence rate, OSHA lost workday cases rate, OSHA severity rate and direct cost per man-year. The employee characteristics of age, experience, height and weight in Sections 3.1.1 to 3.1.4 contain the same types of graphs. Only the collection division's injuries were analyzed for the employee characteristics, and the collection division incurred 75% of the man-hours of exposure.

FIGURE 5 reveals the overall injury pattern of the younger age groups having more injuries with the youngest group of "<20 years old" having the highest incidence rate. The slope of the decrease in incidence rates from younger to older employees, however, did not show as sharp of a slope for the lost workday cases as for the OSHA recordable injuries. This would indicate that more medical treatment only cases are reported for the younger employees.

FIGURE 6 shows the younger age groups still being above average in OSHA severity rates, but that the shape of the curve has altered a great deal from FIGURE 5. Two peaks show on the severity rate curve, the highest being at "30-34 years"

FIGURE 5

OSHA INCIDENCE RATES FOR OSHA RECORDABLE INJURIES
AND LOST WORKDAY CASES BY AGE GROUP
COLLECTION DIVISION



● = OSHA Incidence Rate
+ = OSHA Lost Workday Cases Rate

FIGURE 6

OSHA SEVERITY RATE
BY AGE GROUP
COLLECTION DIVISION

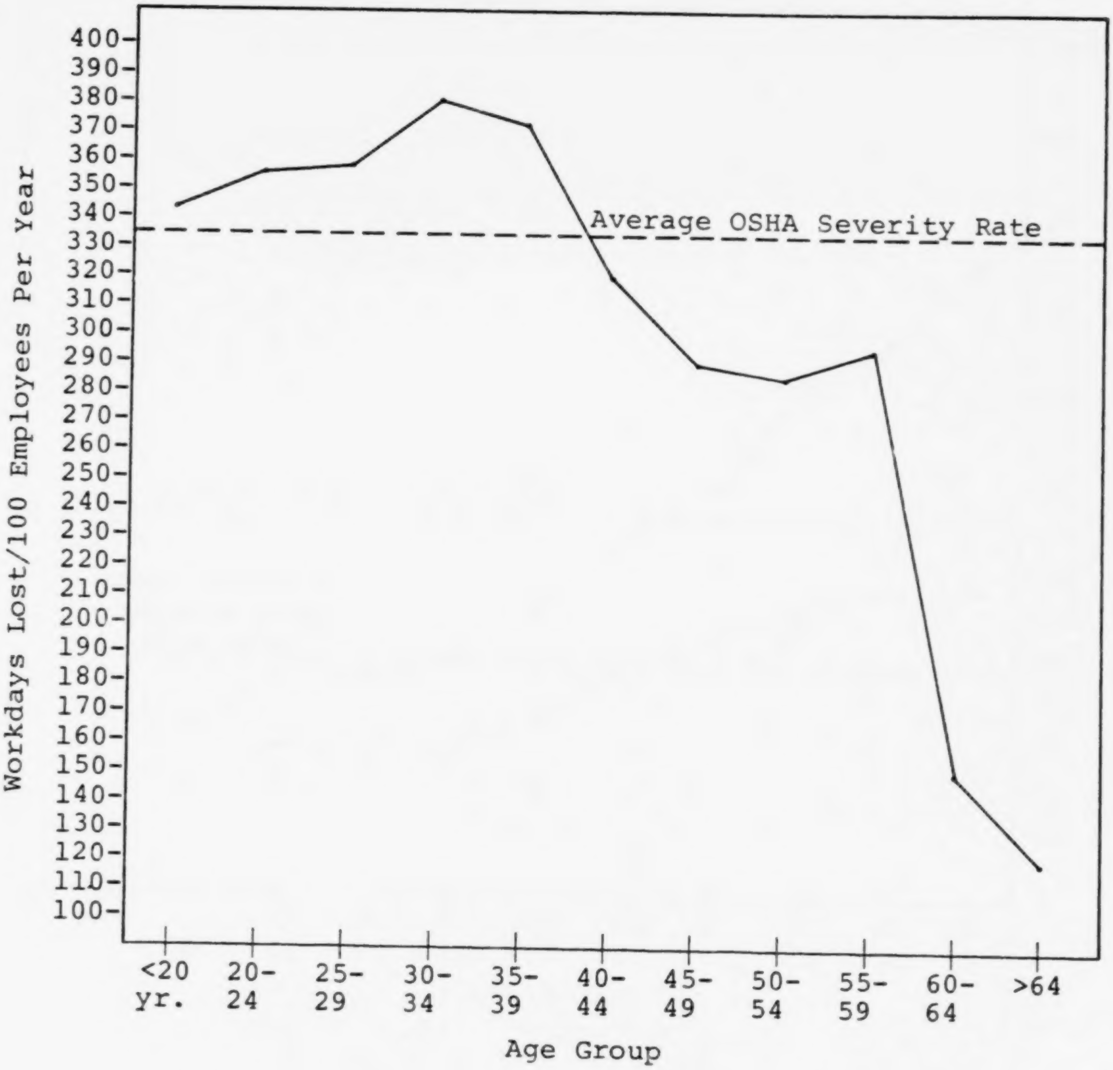
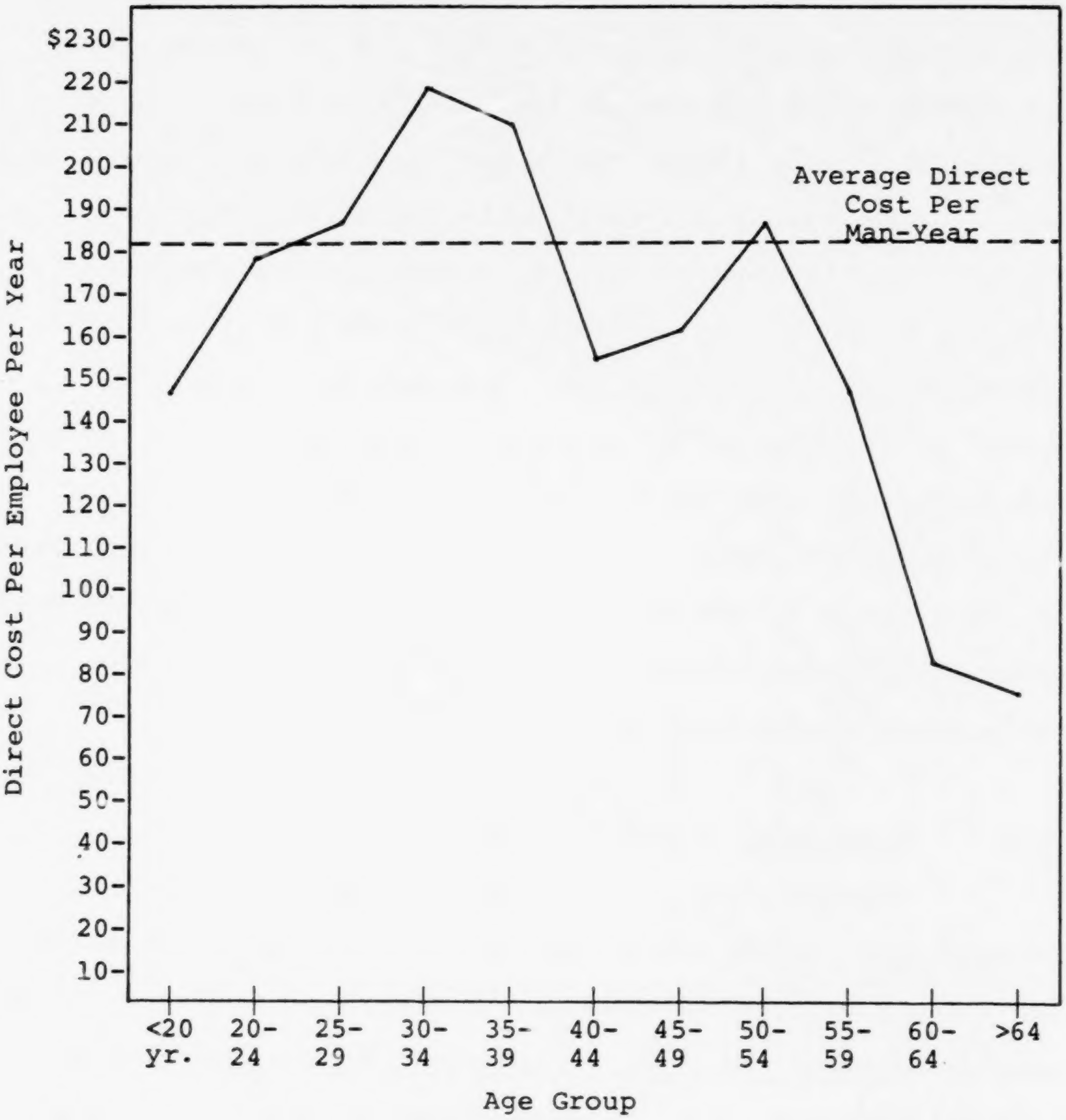


FIGURE 7

DIRECT COST PER MAN-YEAR
BY AGE GROUP
COLLECTION DIVISION



and the second peak at "55-59 years". The severity rates dropped sharply after age "35-39 years".

FIGURE 7 has two peaks similar to those in FIGURE 6, except that the second peak is at "50-54 years" and is slightly above the average line while the second peak in FIGURE 6 was much further below the average line. It also does not show a marked decline in direct cost rates for older employees.

The conclusions that can be drawn about the ages of the injured employees are that younger workers are more likely to be injured while older workers are likely to have more severe and costly injuries. However, the "seniority system" of the jobs of the different age groups need to be taken into consideration since the younger employees are often collectors who have higher exposure to injury while older employees are likely to be in administration or drivers of collection vehicles, with less injury exposure. (Section 3.1.6 discusses injury rates by standard job classifications.)

3.1.2 Experience (EXHIBITS 7A-C)

The experience injury rate curves for the collection division show similar trends as those of the age curves but are much steeper. FIGURE 8 shows that a sharp decline in incidence rates occur after the first three months on the job, with the first month having twice the OSHA incidence rate of the "3-6 month" experience period. A slight second peak also occurs at

FIGURE 8

OSHA INCIDENCE RATES FOR OSHA RECORDABLE INJURIES
AND LOST WORKDAY CASES BY EXPERIENCE GROUP
COLLECTION DIVISION

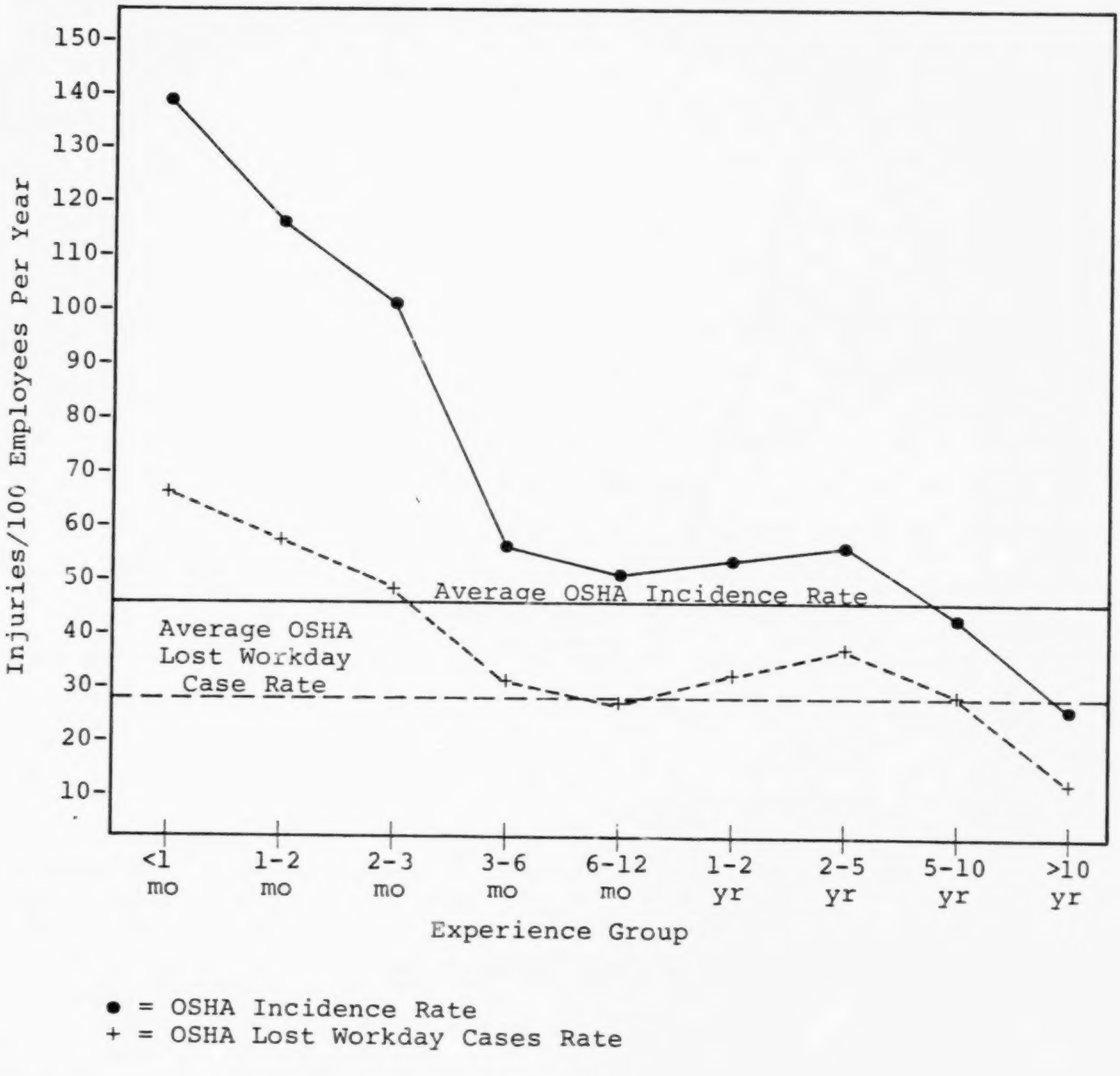


FIGURE 9

OSHA SEVERITY RATE
BY EXPERIENCE GROUP
COLLECTION DIVISION

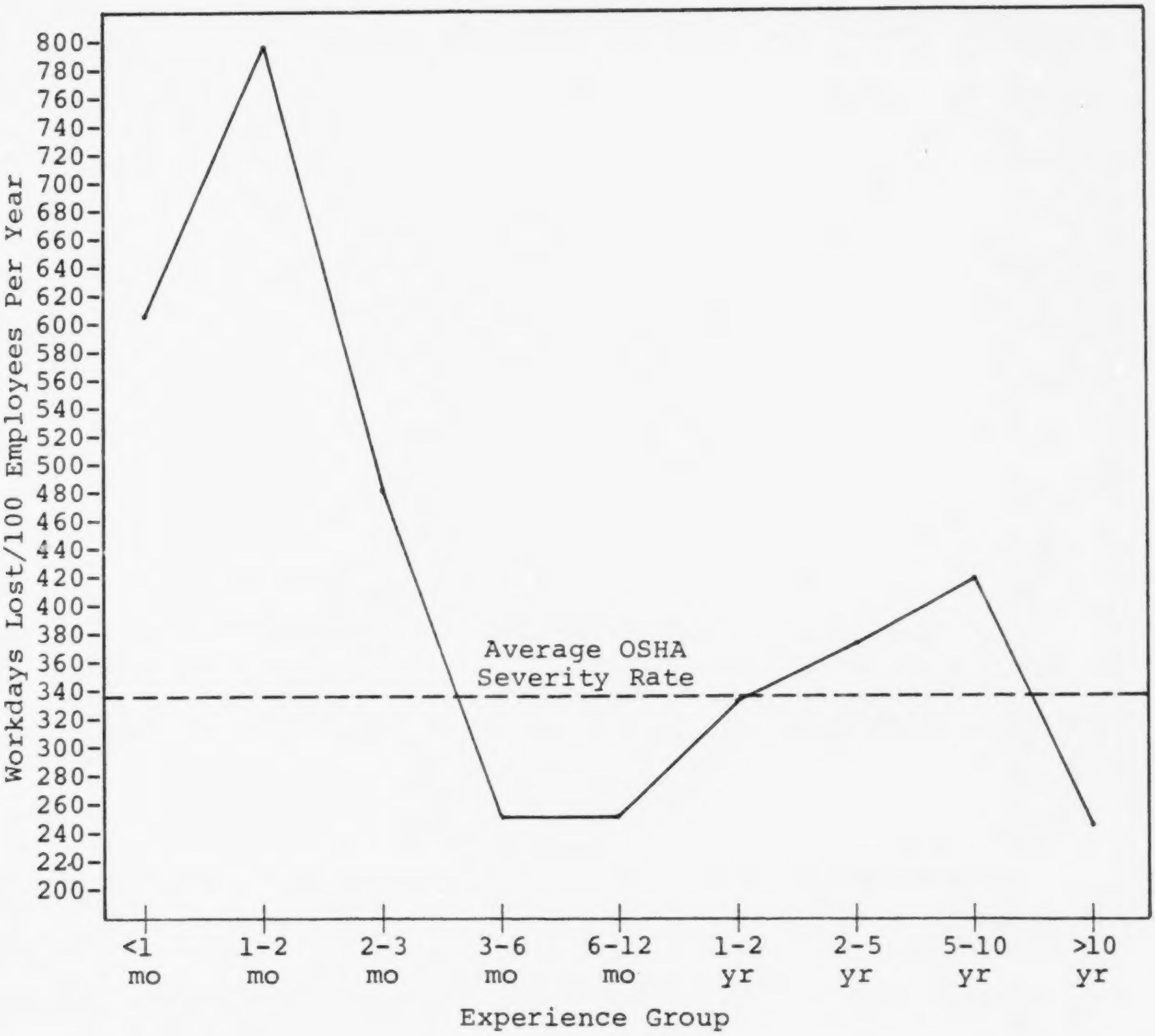
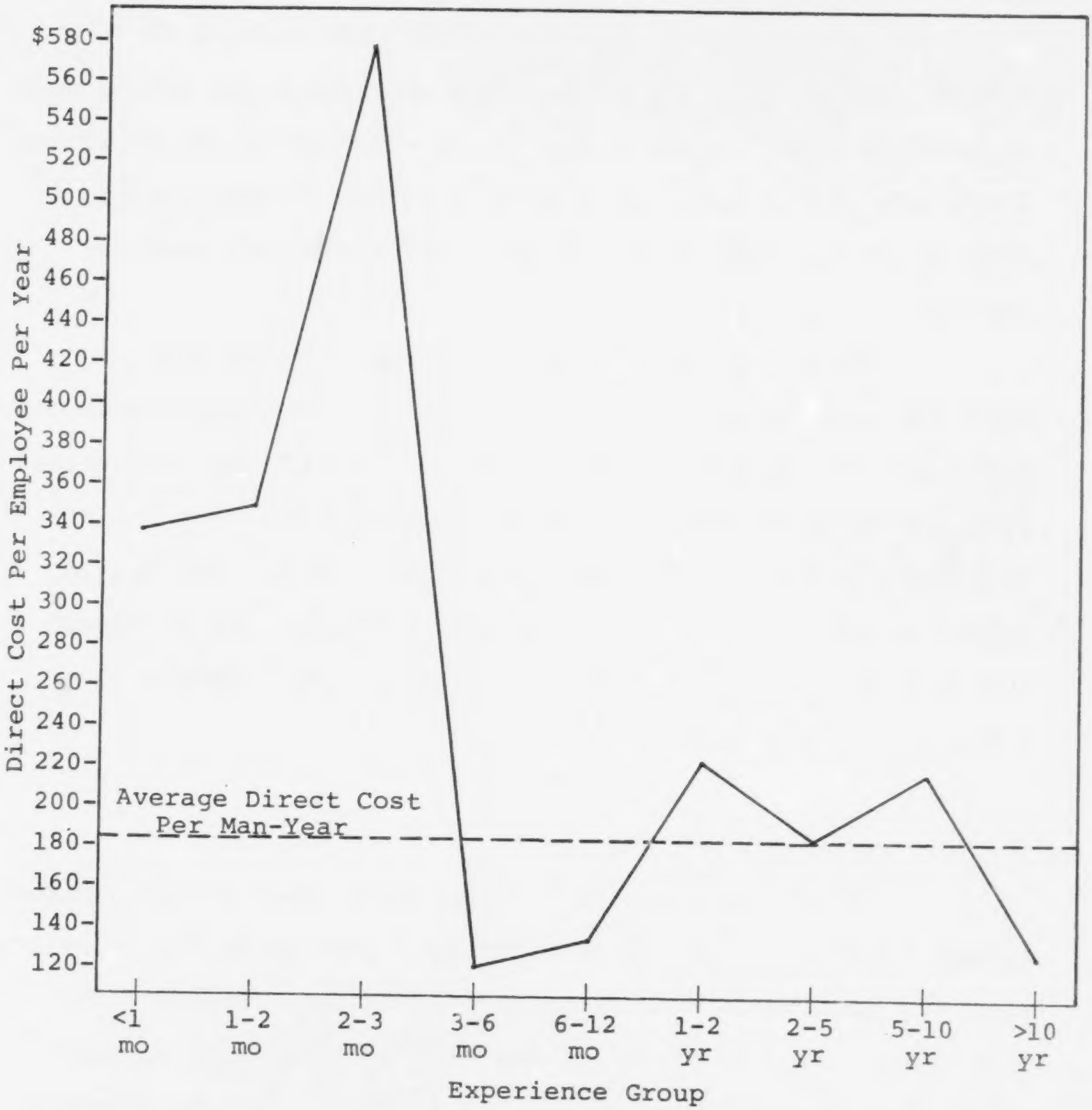


FIGURE 10

DIRECT COST PER MAN-YEAR
BY EXPERIENCE GROUP
COLLECTION DIVISION



the "2-5 years" experience period. What is noticeable in this FIGURE is that the incidence rates stay above the average line until after five years of experience.

FIGURE 9 shows a more pronounced second peak at "5-10 years" experience, and the higher peak shifted to "1-2 months" experience. The higher peak was double the second peak in severity rate. A rapid decline in severity occurs after the first peak and bottoms out from 3-12 months of experience. A similar pattern occurs in FIGURE 10 for the direct cost per man-year.

These injury rates indicate the critical need of employee training for newly hired employees or inexperienced employees in the solid waste industry. In addition, the second peak appearing in the injury rates indicates the need for re-training the experienced employees after a year. The Special Report on back strains as a result of overexertions discussed training for this high frequency accident type (EXHIBIT 22 of Publications volume).

3.1.3 Height (EXHIBITS 8A-C)

FIGURE 11 presents the incidence rates of the various height groups. It indicates slightly higher rates for employees over six feet tall, with the highest rate occurring at 6'3"-6'4" tall. The OSHA lost workday caes curve closely approximated that of the OSHA incidence rate curve. What is interesting in comparing the two curves is that they are nearly

FIGURE 11

OSHA INCIDENCE RATES FOR OSHA RECORDABLE INJURIES AND LOST WORKDAY CASES BY HEIGHT GROUP
COLLECTION DIVISION

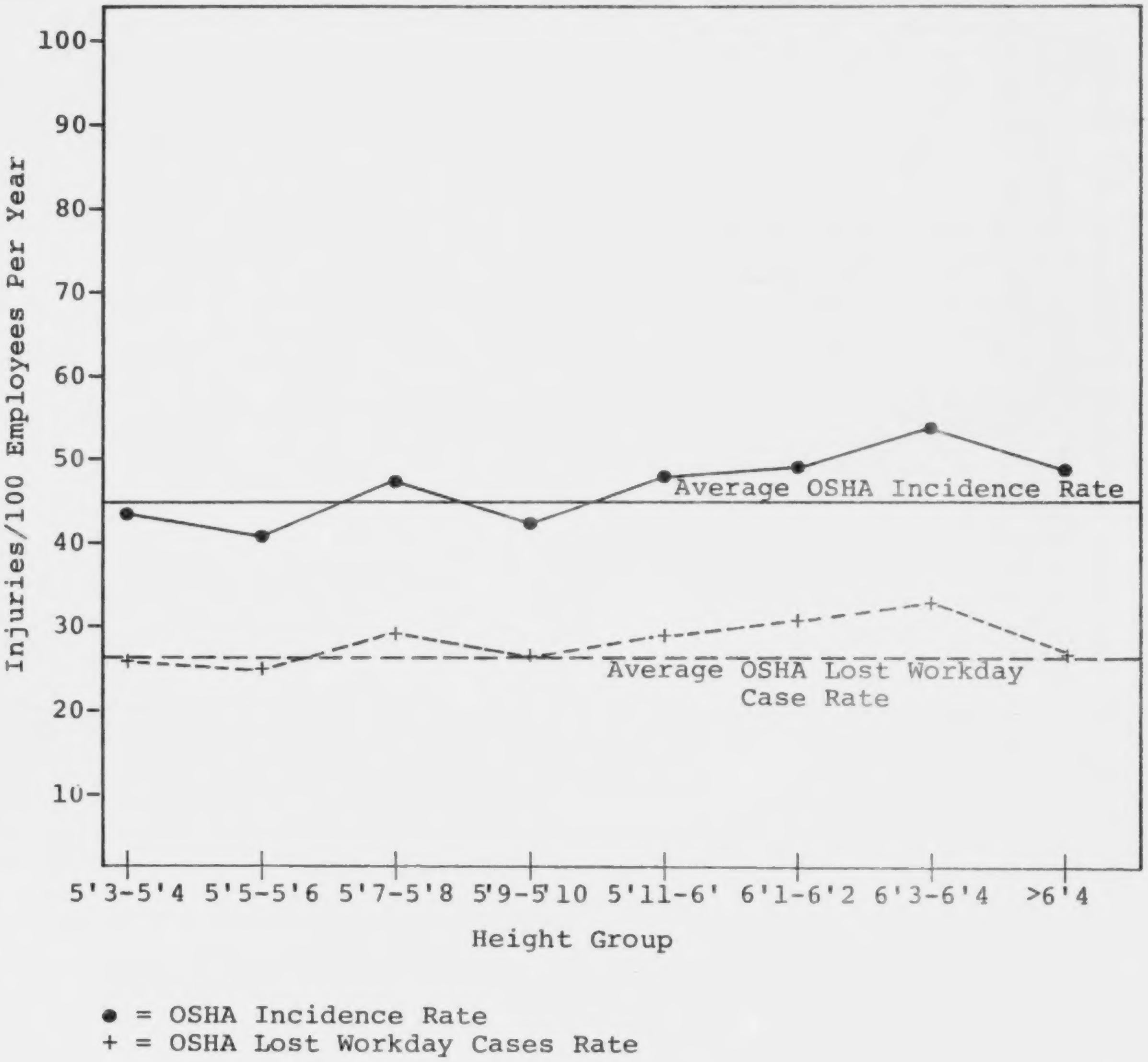


FIGURE 12

OSHA SEVERITY RATE
BY HEIGHT GROUP
COLLECTION DIVISION

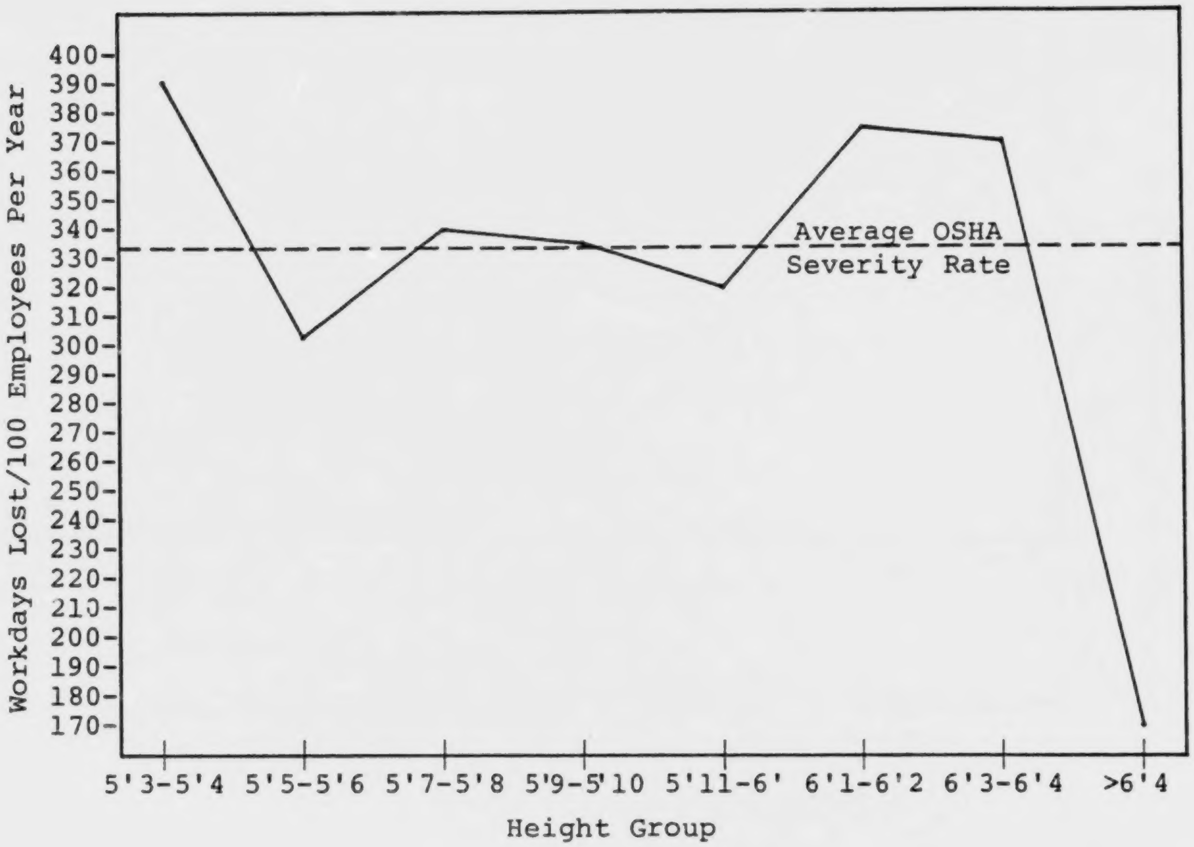
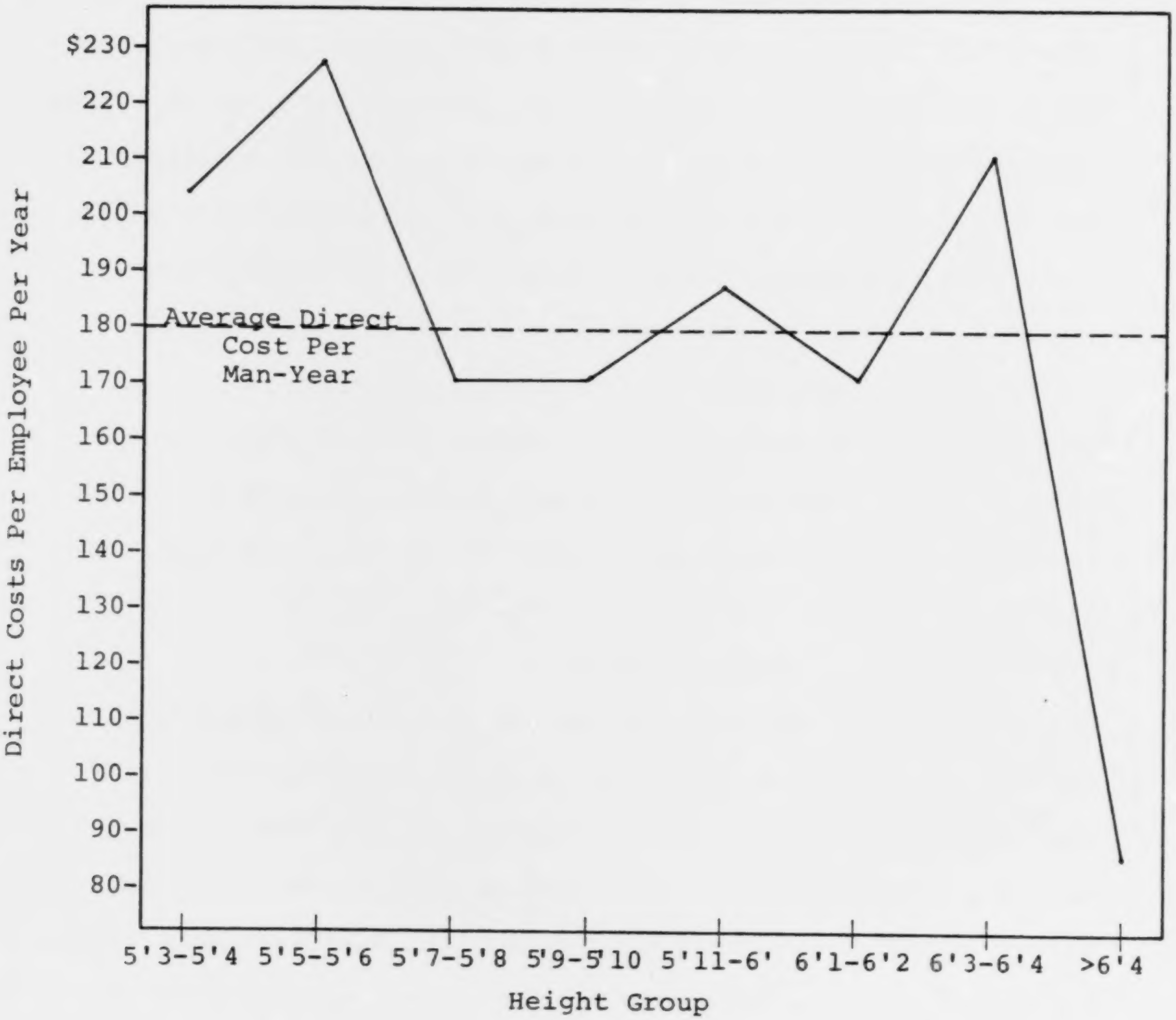


FIGURE 13

DIRECT COST PER MAN-YEAR
BY HEIGHT GROUP
COLLECTION DIVISION



parallel to each other, indicating that no height range results in more frequent non-lost time injuries.

FIGURE 12 describes a more erratic curve for the OSHA severity rates and shows a double peak, at 5'3"-5'4" and 6'1"-6'4". FIGURE 13 also shows a double peak, but they occurred at 5'5"-5'6" and 6'3"-6'4". It is interesting to note that the under 5'7" employees had a lower frequency of injuries but the injuries resulted in high severity and direct costs while with taller employees their injuries were the most frequent and also resulted in high severity and direct costs.

The employee's height alone is probably not a conclusive causal factor analysis. Height should be studied in multiple factor analyses with other factors such as job classification, type of equipment, activity, weight, and age.

3.1.4 Weight (EXHIBITS 9A-C)

The injury rate curves for the weight groups were erratic and probably should be examined in conjunction with the employees' heights rather than singly. FIGURE 14 shows that the injury rates for the various weight groups remained fairly close to the average lines for the OSHA incidence rate as well as for the OSHA lost workday cases rate. Again, the two curves are nearly parallel.

FIGURE 15, however, show pronounced peaks and dips in the OSHA severity rates for the various weight groups. The two peaks occurred at "190-199 lbs." and ">249 lbs" while the two

FIGURE 14

OSHA INCIDENCE RATES FOR OSHA RECORDABLE INJURIES
AND LOST WORKDAY CASES BY WEIGHT GROUP
COLLECTION DIVISION

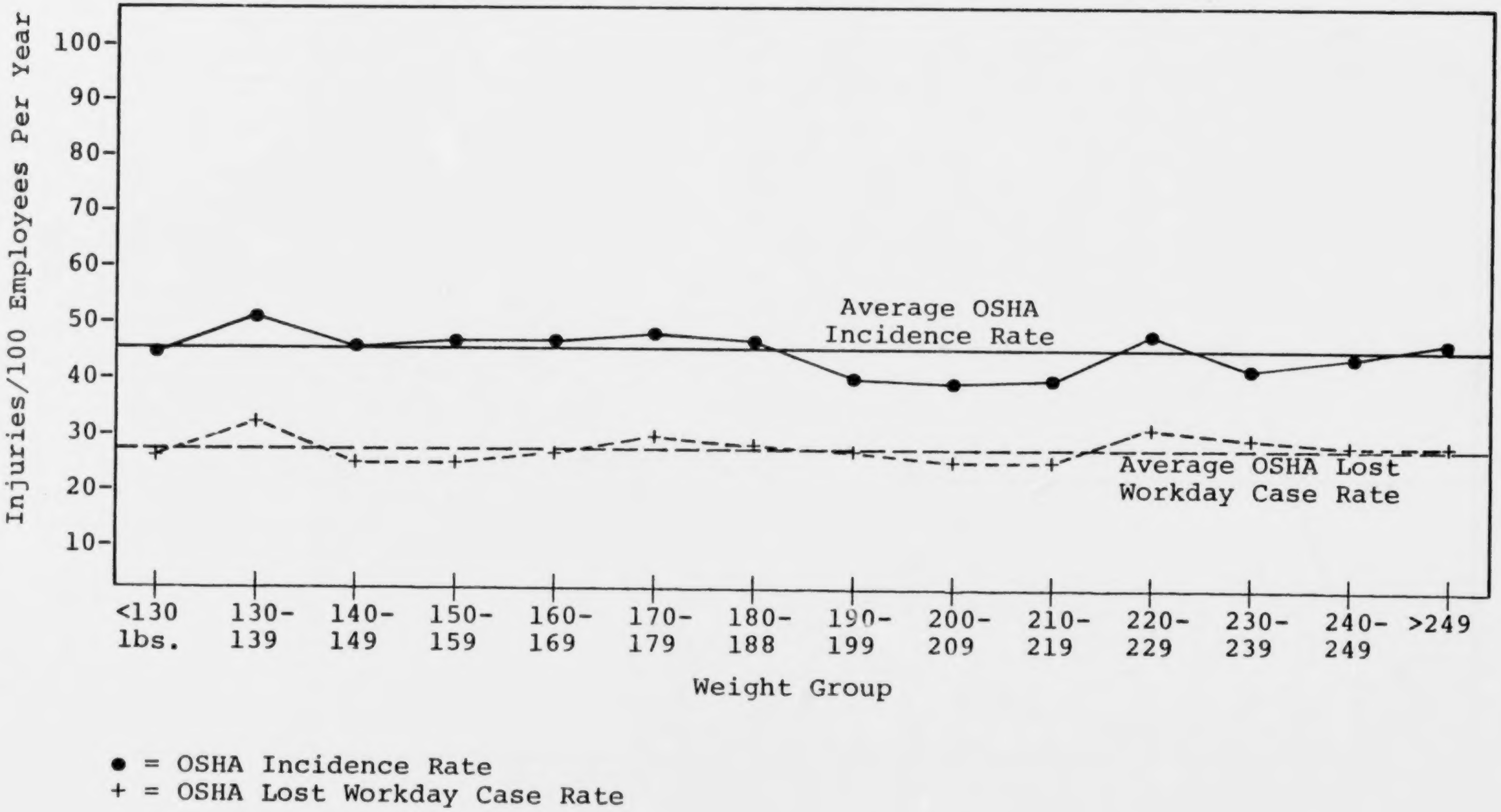


FIGURE 15

OSHA SEVERITY RATE
BY WEIGHT GROUP
COLLECTION DIVISION

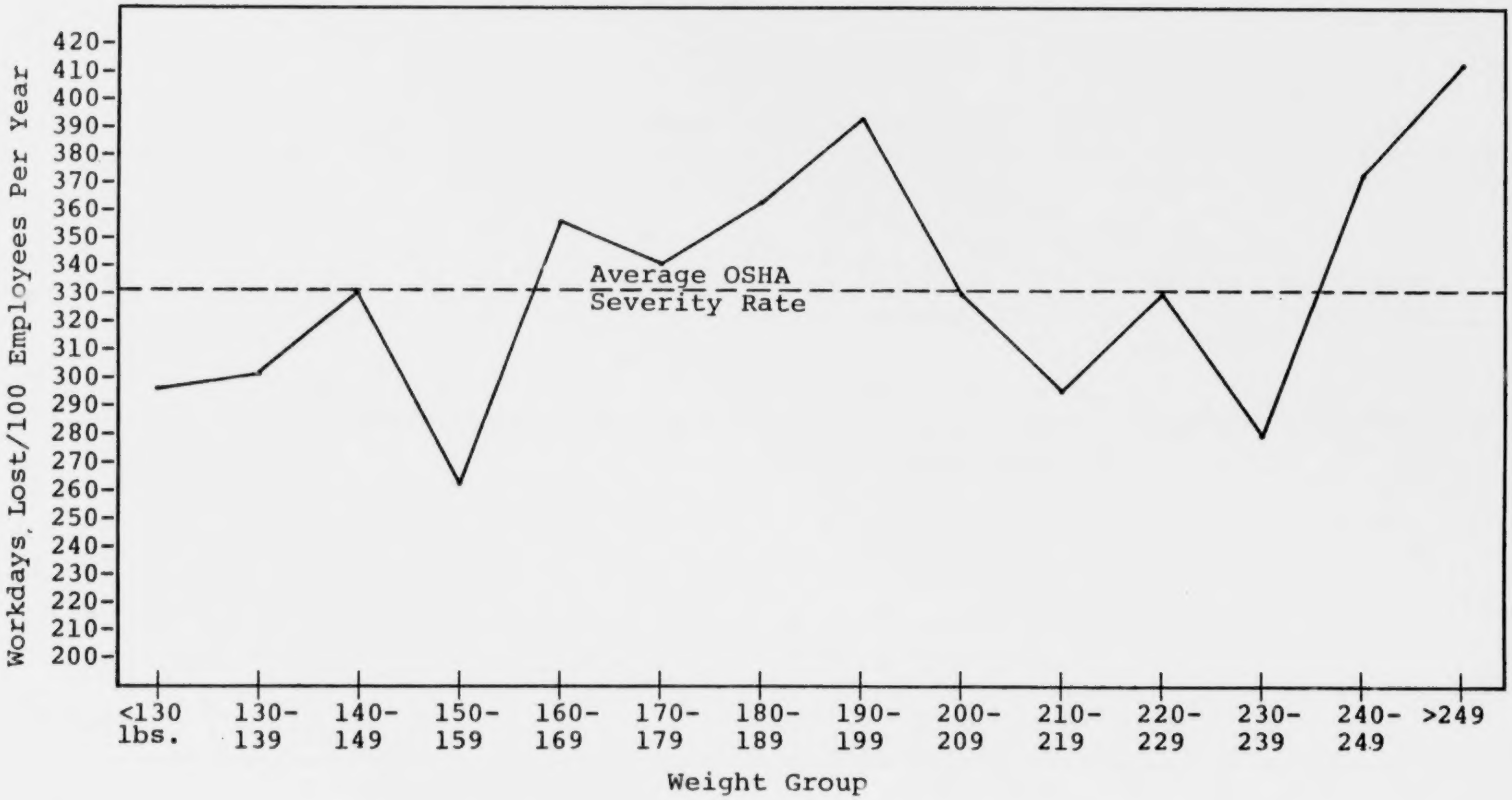
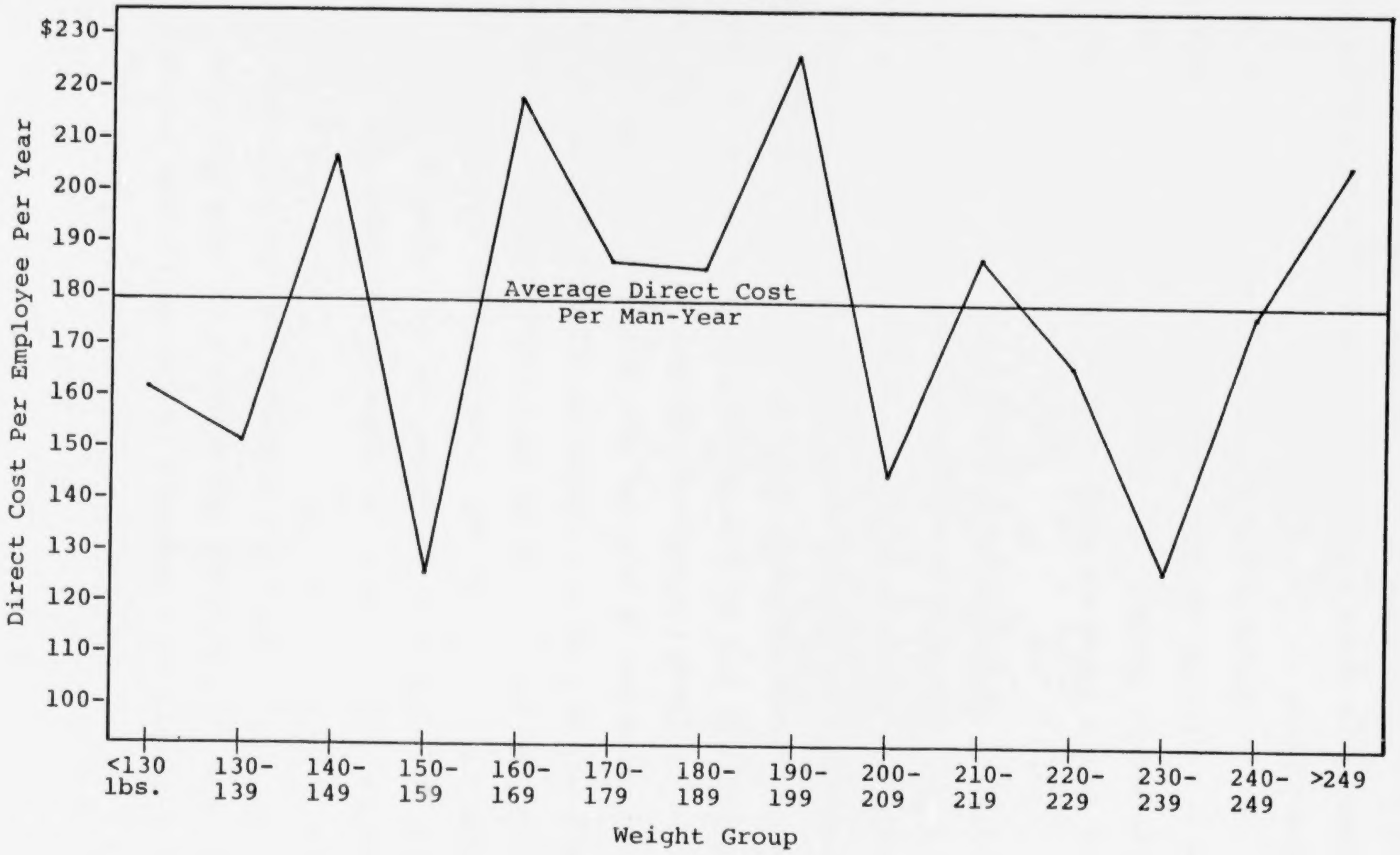


FIGURE 16

DIRECT COST PER MAN-YEAR
BY WEIGHT GROUP
COLLECTION DIVISION



low points occurred at "150-159 lbs." and "230-239 lbs." There was a difference of 140 between the high and low severity rate points.

FIGURE 16 shows even more pronounced points on the curve, although the highs and lows occur at approximately the same weight groups. The rate difference between the high and low points again was large ($100 in direct cost per man-year).

3.1.5 Division (EXHIBITS 10-21)

Thirteen standard divisions were developed by IRIS to denote different operations. FIGURE 17 summarizes the injury rates for the divisions as well as their percentage of man-hours of exposure. (The thirteenth division recycling operations, had no injuries and is not shown on the chart.)

The container maintenance division had the highest OSHA incidence as well as OSHA lost workday cases rates (82 and 35), and the administration division had the lowest in both rates (8 and 3). The second highest OSHA lost workday cases rate (32) and the highest severity rate (382), however, belongs to the residential and commerical collection division, which also had the largest percentage of IRIS user employees (38%) of any division.

Of the disposal operations, the incinerator had the highest injury rates, and of the collection operations, the residential and commercial collection division had the highest

FIGURE 17

AVERAGE INJURY RATES BY IRIS STANDARD DIVISIONS

IRIS Standard Division	OSHA Incidence Rate	OSHA Lost Workday Cases Rate	Severity Rate	Average Workdays Lost Per Lost Workday Case	Average Direct Cost Per OSHA Recordable Injury	Average Direct Cost Per Lost Workday Case	Average Direct Cost Per Man-Year	Percent of Man-Hours of Exposure
Administration	8	3	40	12.42	$309	$ 675	$ 24	4%
Residential & Commercial Collection	42	32	382	11.99	508	606	215	18%
Residential Collection	49	27	329	11.99	357	601	175	56%
Commercial Collection	28	15	328	21.79	573	1,022	160	3%
Landfill	20	9	117	13.10	356	738	70	5%
Incinerator	22	15	329	22.02	675	977	149	2%
Transfer Station	19	9	69	7.60	204	381	39	<1%
Street Cleaning	16	10	133	13.54	292	449	47	7%
Weed & Litter Control	34	19	299	15.80	758	1,322	258	1%
Equipment Maintenance	35	15	224	15.28	330	726	116	2%
Miscellaneous Services	35	18	205	11.63	263	455	93	<1%
Container Maintenance	82	35	200	5.67	87	156	72	<1%

injury rates for the majority of the rates. The commercial collection division, however, although it had low incidence rates, had high direct costs per injury. This division was discussed in the third quarter 1977 Accident Trends report (EXHIBIT 8 in Publications volume).

3.1.6 Standard Job Classification (EXHIBIT 22A-C)

FIGURE 18 presents the top six standard job classifications from the highest to the lowest OSHA incidence rate. Note that three of the job classifications represented less than 1% of the total man-hours of exposure. There were other job classifications that had higher OSHA incidence rates, but only job classifications that represented over 200,000 man-hours of exposure (or 100 full time employees per year) were included on the table.

The injury rates were not consistently high for any one job classification, although the "residential/commercial collection collector/driver" was the highest in four out of six of the injury rates, the OSHA lost workday cases rate, the OSHA severity rate, the direct cost per OSHA recordable injury, and direct cost per man-year. However, this job classification had less than 1% of the total man-hours of exposure. Of the three job classifications that had over 10% man-hours of exposure, the "residential/commercial collection refuse collector (non-driver)" had the highest overall injury rates.

FIGURE 8

AVERAGE INJURY RATES FOR THE TOP SIX JOB CLASSIFICATIONS

Standard Job Classification	OSHA Incidence Rate	OSHA Lost Workday Cases Rate	OSHA Severity Rate	Avg. Workdays Lost per Lost Workday Case	Avg. Direct Costs per OSHA Recordable Injury	Direct Cost per Man-Year	Percent of Total Man-Hours of Exposure
Residential Collection Bulky Item Collector	67	34	286	8.45	$ 192	$128	<1%
Residential Collection Refuse Collector (Non-Driver)	51	29	325	11.39	329	168	31%
Residential Collection Collector/Driver	48	30	356	11.76	413	200	11%
Residential/Commercial Collection Collector/Driver	48	37	524	14.02	1,313	632	<1%
Weed and Litter Control Laborer	47	30	512	17.12	987	460	<1%
Residential/Commercial Collection Refuse Collector (Non-Driver)	46	35	398	11.48	464	214	12%

3.1.7 Region (EXHIBITS 23-26)

The overall trends in injury rates appear to be that the Western Region has the worst rates while the Southern Region has the best. FIGURE 19 gives the injury rates by the four regions of West, Midwest, South and Northeast.

The differences in the injury rates between the various regions may be a function of their varying collection systems and their differences in wage continuation policies. The West tends to have two man curbside collection with either rear end loaders or side loaders while the South tends to have three man or larger backyard collection. Two man collection and backyard collection had the highest injury rates. (See discussions in Sections 3.1.8 and 3.1.11.) As for wage continuation policies, the West has better benefits than the South as well as higher wages. A special Report deals with the effects of wage continuation policies on injury rates (EXHIBIT 24 in Publications volume).

3.1.8 Crew Size (EXHIBITS 27-30)

Crew size includes the driver, and the crew size of one through four men include both commercial and residential collection crews. Therefore, when crew types were examined for one of the Special Reports, the crew sizes were not analyzed as single factors but cross-examined with the factors of type of shift and point of collection. (See EXHIBIT 23 of the Publications volume.)

FIGURE 19

AVERAGE INJURY RATES BY REGION

Region	OSHA Incidence Rate	OSHA Lost Workday Cases Rate	OSHA Severity Rate	Avg. Workdays Lost Per Lost Workday Case	Avg. Direct Cost Per OSHA Recordable Injury	Avg. Direct Cost Per Man-Year	Percent of Man-Hours of Exposure
Western Region	53	34	481	14.29	$472	$249	21%
Mid-Western Region	42	27	253	9.36	332	140	44%
Southern Region	34	18	221	12.54	345	116	18%
North Eastern Region	31	19	273	14.43	445	138	17%

FIGURE 20

AVERAGE INJURY RATES BY CREW SIZE

	Crew Size			
	One Man	Two Man	Three Man	Four Man
OSHA Incidence Rate	33	87	42	70
OSHA Lost Workday Cases Rate	18	44	27	49
Severity Rate	335	493	334	391
Average Workdays Lost Per Lost Workday Case	18.26	11.21	12.47	8.05
Average Direct Cost Per OSHA Recordable Injury	$768	$315	$389	$287
Average Direct Cost Per Man-Year	$255	$275	$163	$204
Percent of Man-Hours of Exposure	9%	19%	52%	11%

FIGURE 20 presents the injury rates for the four crew sizes and their percentages of exposure hours. The two man crews were overall the highest in injury rates. These crews are comprised of residential two man rear loader crews, residential two man side loader crews, and commercial two man front or rear loader crews. However, their high injury rates may be a function of the increased tons of waste they collect per man, which is planned for future IRIS analysis.

The three man crews, surprisingly, had the lowest severity and direct cost per man-year rates, and over half of the collection employees work on this crew size. The three man crews are composed of brush collection crews, residential curbside collection crews, and residential backyard collection crews.

3.1.9 Type of Shift (EXHIBITS 31-32)

The type of shift for solid waste collection is an important factor to analyze because of the "incentive" system employed by many solid waste organizations to encourage their collection employees to finish their routes quicker. It is a productivity incentive since the employees are allowed to go home when the route is finished; it is called a task system of type of shift. The other type of shift is based on a straight 8 hour shift that pays for the number of hours spent rather than the amount of tonnage or stops. A third type of shift that is a compromise between the two is a modified task collection system where the employees are not allowed to leave unless all of the crews in their section are done so that they have less incentive to hurry through their work.

The task system has been suspected to be higher risk for injuries because of haste. The IRIS data in FIGURE 21 appear to bear this out. The task collection employees were higher in every injury rate except for the workdays lost per lost workday case rate. The OSHA lost workday cases rate for the task collection was 43% higher than for hourly. A separate analysis of the modified task systems still needs to be performed.

FIGURE 21

AVERAGE INJURY RATES
BY TYPE OF SHIFT

	Task	Hourly
OSHA Incidence Rate	51	47
OSHA Lost Workday Cases Rate	33	23
Severity Rate	380	274
Average Workdays Lost Per Lost Workday Case	11.56	12.04
Average Direct Cost Per OSHA Recordable Injury	$378	$358
Average Direct Cost Per Man-Year	$192	$170
Percent of Man-Hours of Exposure	68%	32%

3.1.8 Crew Type (EXHIBITS 33-44)

IRIS differentiated twelve separate crew types, the majority of which were collection crew types. They were differentiated by their material being handled (e.g., litter can, bulky item, paper, brush, etc.). FIGURE 22 presents the injury

FIGURE 22

AVERAGE INJURY RATES BY CREW TYPE

Crew Type	OSHA Incidence Rate	OSHA Lost Workday Cases Rate	Severity Rate	Average Workdays Lost Per Lost Workday Case	Average Direct Cost Per OSHA Recordable Injury	Average Direct Cost Per Man-Year	Percent of Man-Hours of Exposure
Residential Collection	59	35	383	10.82	$ 341	$202	66%
Commercial Collection	22	13	271	20.45	1,173	253	8%
Brush Collection	28	12	166	13.69	287	81	6%
Dead Animal Collection	35	23	178	7.62	235	82	<1%
Paper Collection	22	18	386	21.62	700	156	<1%
Bulky Waste Collection	31	18	245	13.76	286	89	3%
Street Cleaning	7	5	57	11.95	365	26	4%
Litter Crew	41	14	151	11.00	222	91	<1%
Residential and Commercial Combined	49	34	437	13.04	359	177	9%
Manual Street Sweeping	14	12	210	17.84	489	70	2%
Litter Can Pick-up	144	96	479	5.00	277	399	<1%
Brush and Bulky Waste Collection	71	34	539	15.75	425	302	<1%

rates and the percentage of crew type hours of exposure for each crew type.

The bottom two crew types, litter can pick-up and brush and bulky waste collection, were very high in incidence, severity and direct cost per man-year rates even though they represented only a small percentage (1%) of the collection crew man-hours. By far, the majority of the IRIS users' crews fell under the category of residential collection (66%), which had:

- the third highest OSHA incidence rate - 59
- the second highest OSHA lost workday cases rate - 35
- the fifth highest severity rate - 383
- the fourth highest direct cost per man-year - $202

The third quarter 1977 Accident Trends report (EXHIBIT 8 in Publications volume) dealt with three specialized collection crews, brush collection, commercial collection, and bulky waste collection, and their associated unique injury problems. All three of these types of collection had relatively low injury rates.

3.1.11 Point of Collection (EXHIBITS 45-58)

The point of collection refers to where a particular crew collects from, whether it is in the alley, at the curb, from the backyard, or a combination of the three. Mechanized collection, in which the collector does not manually handle the container, is also separated. In addition, backyard collection is further separated into three types: backyard without intermediate container, backyard with tub, and backyard with wheeled cart. FIGURE 23 shows the injury rates for the majority of the collection crews on IRIS. The crews that had unusual combinations of points of collection such that only one user fell into the category are not shown.

FIGURE 23 shows that the majority of the IRIS users' collection crews fall into two main points of collection, curbside collection (27%) and alley and curbside (24%). The collection trends appear to be favoring converting to curbside collection, and several users have effected this change while on IRIS. Backyard collection only accounted for 11% of the collection man-hours, and mechanized collection less than 1%. Commercial collection is not included in the categories.

The three high injury points of collection categories were backyard with tub, alley, and curbside and backyard with tub. Backyard with tub may be high in injury rates because of the extra large and heavy intermediate containers which the employees carry back and forth from the backyard to the truck. Overall, curbside collection was slightly lower than backyard. Section 3.2.1 will analyze these crew type factors of size, type of shift, type of collection and point of collection in depth by examining combinations of the factors.

FIGURE 23

AVERAGE INJURY RATES BY POINT OF COLLECTION

Point of Collection	OSHA Incidence Rate	OSHA Lost Workday Cases Rate	Severity Rate	Average Workdays Lost Per Lost Workday Case	Average Direct Cost Per OSHA Recordable Injury	Average Direct Cost Per Man-Year	Percent of Man-Hours of Exposure
Backyard without Intermediate Container	65	47	481	10.16	$377	$245	2%
Backyard with Tub	79	48	432	8.79	478	379	2%
Backyard with Wheeled Cart	59	44	348	7.96	250	148	7%
Curbside	53	36	439	11.96	420	222	27%
Alley	78	59	510	8.68	294	230	2%
Mechanized	44	17	258	15.27	218	96	<1%
Alley and Curbside	58	22	297	13.57	265	155	24%
Curbside and Backyard with Tub	78	53	411	7.75	231	180	4%
CS/BY/BY with Tub/Alley	4	4	11	3.00	104	4	<1%
BY with Tub/BY with Cart	63	39	213	5.43	171	108	<1%
CS/Alley/BY with Tub	73	49	802	16.33	543	397	4%
Curbside/BY without Intermediate Container	35	14	77	5.50	139	49	<1%
Alley/BY with Cart	25	21	186	9.04	529	138	7%
CS/Alley/BY with Tub/BY with Cart	46	21	239	11.53	183	84	3%

3.2 MULTIPLE FACTOR ANALYSES

To observe factor relationships, the injury rates for various combinations of factors require examination. Specific IRIS programs as well as the "master" program were used to compute injury rates for:

- the crew type combinations of point of collection, size of crew and type of shift and of type of crew, size of crew and type of shift
- the employee characteristics of age, experience, height and weight by the top five accident types of:
    - overexertion involving container
    - slip on same level
    - struck by waste
    - fall on same level
    - vehicle accident
- other special factor combinations from the "master" program

3.2.1 Crew Type

The two-factor combinations of the crew type factors of size, type of shift, point of collection, and type of collection were analyzed in the Special Reports (EXHIBIT 23 in Publications volume) and were determined to be misleading because three factors were necessary to provide true comparisons of the different collection systems. Therefore, two-factor combinations are not presented in this section. Three-factor crew type combinations were analyzed, instead. The three-factor combinations determined to be of value in comparing collection systems were:

- point of collection, size, and type of shift. This was previously analyzed and summarized in a Special Report. However, the tables presented in this section (FIGURES 24-30) were derived from a longer time period (October 1976 through September 1977) and in an unsummarized form.
- type of collection, size, and type of shift.

Four-factor analyses were determined to be too detailed of an analyses since the number of combinations were such that most of the crews were unique. Thus, the usefulness of the data analyses becomes negated.

Another problem with using too many factors is that the man-hours of exposure at just the three factor combinations were already less than 1% for most combinations. (See FIGURES 30 and 37).

(Note: The computer printouts from which this section's charts were derived are not included in this report because they would have added another 100 pages to this report, which was felt to outweigh their value to the report.)

3.2.1.1 Point of Collection, Size, and Type of Shift

The points of collection chosen to be examined were the crews that did not combine curbside with backyard. Therefore, only 65% of the collection division's man-hours are represented. FIGURES 24-30 also summarize the injury rates for the combined backyard and the curbside/alley points of collection at the bottom of each FIGURE. Note that backyard collection

FIGURE 24

THREE FACTOR CREW TYPE ANALYSES BY POINT OF COLLECTION, SIZE OF CREW AND TYPE OF SHIFT

OSHA INCIDENCE RATE

Point of Collection	One Man		Two Man		Three Man		Four Man	
	Task	Hourly	Task	Hourly	Task	Hourly	Task	Hourly
Curbside	69	68	106	75	40	49	73	--
Alley	--	--	--	--	83	11	--	--
Curbside and Alley	84	16	65	338	26	30	50	40
Backyard without Intermediate Container	--	--	--	--	56	--	68	--
Backyard with Tub	--	--	--	--	189	--	--	--
Backyard with Cart	--	--	--	--	19	--	383	--
Backyard with Tub/Cart	--	--	--	--	16	--	84	--
Backyard	--	--	--	--	88	--	166	--
Curbside/Alley	80	23	91	242	38	41	54	40

FIGURE 25

THREE FACTOR CREW TYPE ANALYSES BY POINT OF COLLECTION, SIZE OF CREW AND TYPE OF SHIFT

OSHA LOST WORKDAY CASES RATE

Point of Collection	One Man		Two Man		Three Man		Four Man	
	Task	Hourly	Task	Hourly	Task	Hourly	Task	Hourly
Curbside	56	24	71	30	28	34	54	--
Alley	--	--	--	--	63	--	--	--
Curbside and Alley	39	13	39	74	12	19	16	6
Backyard without Intermediate Container	--	--	--	--	10	--	53	--
Backyard with Tub	--	--	--	--	114	--	--	--
Backyard with Cart	--	--	--	--	10	--	281	--
Backyard with Tub/Cart	--	--	--	--	11	--	46	--
Backyard	--	--	--	--	46	--	130	--
Curbside/Alley	43	14	58	53	24	27	22	6

FIGURE 26

THREE FACTOR CREW TYPE ANALYSES BY POINT OF COLLECTION, SIZE OF CREW AND TYPE OF SHIFT

SEVERITY RATE

Point of Collection	One Man		Two Man		Three Man		Four Man	
	Task	Hourly	Task	Hourly	Task	Hourly	Task	Hourly
Curbside	902	83	838	75	380	340	399	--
Alley	--	--	--	--	548	--	--	--
Curbside and Alley	607	190	494	548	213	316	187	89
Backyard without Intermediate Container	--	--	--	--	378	--	510	--
Backyard with Tub	--	--	--	--	747	--	--	--
Backyard with Cart	--	--	--	--	82	--	1,973	--
Backyard with Tub/Cart	--	--	--	--	87	--	279	--
Backyard	--	--	--	--	341	--	990	--
Curbside/Alley	675	175	695	392	314	323	223	89

FIGURE 27

THREE FACTOR CREW TYPE ANALYSES BY POINT OF COLLECTION, SIZE OF CREW AND TYPE OF SHIFT

AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE

Point of Collection	One Man		Two Man		Three Man		Four Man	
	Task	Hourly	Task	Hourly	Task	Hourly	Task	Hourly
Curbside	16.06	3.40	11.75	2.50	13.04	9.95	7.45	--
Alley	--	--	--	--	8.68	--	--	--
Curbside and Alley	15.50	14.88	12.89	7.42	18.16	16.42	11.69	13.86
Backyard without Intermediate Container	--	--	--	--	37.00	--	9.54	--
Backyard with Tub	--	--	--	--	6.10	--	--	--
Backyard with Cart	--	--	--	--	8.50	--	7.03	--
Backyard with Tub/Cart	--	--	--	--	8.00	--	6.00	--
Backyard	--	--	--	--	7.40	--	7.60	--
Curbside/Alley	15.67	12.27	12.01	7.34	13.14	11.94	9.96	13.86

FIGURE 28

THREE FACTOR CREW TYPE ANALYSES BY POINT OF COLLECTION, SIZE OF CREW AND TYPE OF SHIFT

AVERAGE DIRECT COST PER OSHA RECORDABLE INJURY

Point of Collection	One Man		Two Man		Three Man		Four Man	
	Task	Hourly	Task	Hourly	Task	Hourly	Task	Hourly
Curbside	$665	$ 71	$411	$ 89	$417	$468	$207	$--
Alley	--	--	--	--	296	136	--	--
Curbside and Alley	323	703	434	125	327	536	171	121
Backyard without Intermediate Container	--	--	--	--	199	--	395	--
Backyard with Tub	--	--	--	--	217	--	--	--
Backyard with Cart	--	--	--	--	176	--	219	--
Backyard with Tub/Cart	--	--	--	--	37	--	144	--
Backyard	--	--	--	--	207	--	273	--
Curbside/Alley	390	450	417	125	373	480	179	121

FIGURE 29

THREE FACTOR CREW TYPE ANALYSES BY POINT OF COLLECTION, SIZE OF CREW AND TYPE OF SHIFT

AVERAGE DIRECT COST PER MAN-YEAR

Point of Collection	One Man		Two Man		Three Man		Four Man	
	Task	Hourly	Task	Hourly	Task	Hourly	Task	Hourly
Curbside	$456	$ 48	$437	$ 66	$169	$231	$151	$--
Alley	--	--	--	--	246	14	--	--
Curbside and Alley	271	111	281	424	86	164	85	49
Backyard without Intermediate Container	--	--	--	--	112	--	269	--
Backyard with Tub	--	--	--	--	421	--	--	--
Backyard with Cart	--	--	--	--	34	--	840	--
Backyard with Tub/Cart	--	--	--	--	6	--	120	--
Backyard	--	--	--	--	187	--	452	--
Curbside/Alley	314	102	379	302	142	195	97	49

FIGURE 30

THREE FACTOR CREW TYPE ANALYSES BY POINT OF COLLECTION, SIZE OF CREW AND TYPE OF SHIFT

PERCENT OF MAN-HOURS OF EXPOSURE

Point of Collection	One Man		Two Man		Three Man		Four Man	
	Task	Hourly	Task	Hourly	Task	Hourly	Task	Hourly
Curbside	<1%	<1%	5%	<1%	15%	5%	<1%	--
Alley	--	--	--	--	2%	<1%	--	--
Curbside and Alley	1%	1%	3%	2%	11%	4%	1%	1%
Backyard without Intermediate Container	--	--	--	--	<1%	--	2%	--
Backyard with Tub	--	--	--	--	<1%	--	--	--
Backyard with Cart	--	--	--	--	<1%	--	1%	--
Backyard with Tub/Cart	--	--	--	--	<1%	--	<1%	--
Backyard	--	--	--	--	1%	--	3%	--
Curbside/Alley	1%	2%	8%	2%	28%	5%	1%	1%

could only be cross correlated with the other two factors at three man task and four man task. This does not mean that there are no hourly crews or five man crews, etc. They exist but were not in operation at the IRIS users. Curbside/alley collection, on the other hand, were represented in every category.

These FIGURES can best be used to compare the various residential collection systems. Each injury rate FIGURE can be examined for the trends it reveals:

- OSHA incidence rate (FIGURE 24).
  - Backyard collection had higher rates than curbside/alley, with four man backyard task collection worse than three man.
  - Of the curbside/alley collection crews, the highest category was two man hourly, which was two and a half times higher than the next high crew type, two man task.

- Comparing the various crew sizes, two man was the worst and four man second worst.

- Comparing type of shift, there was no clear cut demarcation since the task system was higher in two out of four cases.

- OSHA lost workday cases rate (FIGURE 25).

  - Again, for backyard collection four man task was far worse than three man by nearly three times.

  - Backyard collection was still worse than curbside overall.

  - Of the curbside/alley categories, the two man collection crew size had nearly double the OSHA lost workday cases rates of the other curbside/alley collections. However, now two man task is slightly higher than two man hourly (58 vs. 53). In addition, except for the one man task crews, the three man crews were the second worst category.

- OSHA severity rate (FIGURE 26).

  - The rates varied widely in the categories, with four man task backyard collection at 990 and four man hourly curbside collection at 89.

  - Of the backyard, four man task was still worse than three man task (990 vs. 341).

  - Of the curbside/alley, the highest categories were two man task and one man task, and two man curbside/alley collection crews still had higher rates than the other crew sizes.

- Average workdays lost per lost workday case (FIGURE 27).

  - The highest category, surprisingly, was one man task curbside/alley collection, and three man task curbside/alley and four man hourly curbside/alley were close seconds.

  - The backyard collection figures were far less than those of curbside/alley.

- Average direct cost per OSHA recordable injury (FIGURE 28).

  - Again, the ranking was reversed, with backyard collection's injuries costing less than those of curbside/alley. (Note: the direct costs and lost workdays figures may be a reflection of wage continuation benefit differences, e.g., at one user the employee may be paid full pay from the first day of his injury with injury leave and Worker's Compensation payments while at another user, the employee may only be paid two-thirds of his pay after the third day of his being away from work due to injury.)

  - The highest curbside/alley category was three man hourly, and the lowest was four man hourly.

  - One man and three man curbside/alley collection were the highest overall in direct costs per OSHA recordable injury.

- Average direct cost per man-year (FIGURE 29).

  - There was a large variation in the direct injury costs per employee per year. Four man task backyard collection was the highest category at $452.

  - Two man was the worst of the curbside/alley collection crews and four man the best. One man task still remained high, though.

3.2.1.2 Type of Collection, Size, and Type of Shift

These FIGURES are useful in comparing the various specialized collection. As explained previously, for residential collection, the FIGURES in Section 3.2.1.2 are more informative since they distinguish the different points of collection in the residential collection systems.

Ignoring the residential collection injury rates (top line), the other types of collection can be compared for:

FIGURE 31

THREE FACTOR CREW TYPE ANALYSES BY TYPE OF CREW, CREW SIZE AND TYPE OF SHIFT

OSHA INCIDENCE RATE

Crew Type	One Man		Two Man		Three Man		Four Man	
	Task	Hourly	Task	Hourly	Task	Hourly	Task	Hourly
Residential Collection	78	21	85	284	40	65	140	21
Commercial Collection	27	14	29	14	13	9	--	60
Brush Collection	56	--	14	66	21	32	73	42
Dead Animal Collection	53	41	17	40	--	--	--	--
Paper Collection	62	37	48	--	--	--	--	--
Bulky Waste Crew	--	--	90	--	52	13	--	--
Street Cleaning	336	9	--	--	4	1	--	--
Residential & Commercial Combined	52	17	33	24	60	44	--	--
Manual Sweeper Crew	24	15	192	--	213	--	--	--
Brush & Bulky Waste	--	288	--	154	52	52	--	--

FIGURE 32

THREE FACTOR CREW TYPE ANALYSES BY TYPE OF CREW, CREW SIZE AND TYPE OF SHIFT

OSHA LOST WORKDAY CASES RATE

Crew Type	One Man		Two Man		Three Man		Four Man	
	Task	Hourly	Task	Hourly	Task	Hourly	Task	Hourly
Residential Collection	33	13	56	63	25	44	98	19
Commercial Collection	14	9	18	9	6	7	--	36
Brush Collection	24	--	14	36	13	16	54	7
Dead Animal Collection	38	14	17	40	--	--	--	--
Paper Collection	62	--	--	--	--	--	--	--
Bulky Waste Crew	--	--	60	--	29	7	--	--
Street Cleaning	240	7	--	--	1	1	--	--
Residential & Commercial Combined	41	17	22	24	41	27	--	--
Manual Sweeper Crew	18	10	192	--	213	--	--	--
Brush & Bulky Waste	--	192	--	27	29	47	--	--

FIGURE 33

THREE FACTOR CREW TYPE ANALYSES BY TYPE OF CREW, CREW SIZE AND TYPE OF SHIFT

OSHA SEVERITY RATE

Crew Type	One Man		Two Man		Three Man		Four Man	
	Task	Hourly	Task	Hourly	Task	Hourly	Task	Hourly
Residential Collection	525	181	639	445	288	587	758	161
Commercial Collection	804	90	282	143	125	91	--	635
Brush Collection	135	--	57	575	119	274	399	93
Dead Animal Collection	365	27	157	80	--	--	--	--
Paper Collection	1,346	--	--	--	--	--	--	--
Bulky Waste Crew	--	--	1,641	--	247	114	--	--
Street Cleaning	3,404	63	--	--	1	22	--	--
Residential & Commercial Combined	525	52	383	48	527	386	--	--
Manual Sweeper Crew	508	213	1,215	--	2,301	--	--	--
Brush & Bulky Waste	--	767	--	107	247	965	--	--

FIGURE 34

THREE FACTOR CREW TYPE ANALYSES BY TYPE OF CREW, CREW SIZE AND TYPE OF SHIFT

AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE

Crew Type	One Man		Two Man		Three Man		Four Man	
	Task	Hourly	Task	Hourly	Task	Hourly	Task	Hourly
Residential Collection	15.75	14.37	11.33	7.06	11.46	13.22	7.76	8.57
Commercial Collection	59.08	9.67	15.32	15.90	21.00	13.83	--	17.67
Brush Collection	5.67	--	4.00	16.00	9.75	17.13	7.45	13.86
Dead Animal Collection	9.60	2.00	9.00	2.00	--	--	--	--
Paper Collection	21.62	--	--	--	--	--	--	--
Bulky Waste Crew	--	--	31.00	--	8.48	15.00	--	--
Street Cleaning	15.83	9.50	--	--	3.50	30.00	--	--
Residential & Commercial Combined	12.82	3.00	17.33	2.00	12.80	14.07	--	--
Manual Sweeper Crew	28.67	20.86	6.33	--	10.80	--	--	--
Brush & Bulky Waste	--	4.00	--	4.00	11.75	20.39	--	--

FIGURE 35

THREE FACTOR CREW TYPE ANALYSES BY TYPE OF CREW, CREW SIZE AND TYPE OF SHIFT

AVERAGE DIRECT COST PER OSHA RECORDABLE INJURY

Crew Type	One Man		Two Man		Three Man		Four Man	
	Task	Hourly	Task	Hourly	Task	Hourly	Task	Hourly
Residential Collection	$ 299	$493	$403	$125	$336	$550	$247	$579
Commercial Collection	4,631	1,112	516	699	573	638	--	345
Brush Collection	78	--	174	370	254	431	207	121
Dead Animal Collection	305	85	345	85	--	--	--	--
Paper Collection	871	20	20	--	--	--	--	--
Bulky Waste Crew	--	--	714	--	191	236	--	--
Street Cleaning	356	267	--	--	32	2,968	--	--
Residential & Commercial Combined	520	141	476	542	329	424	--	--
Manual Sweeper Crew	585	598	194	--	276	--	--	--
Brush & Bulky Waste	1,063	112	--	72	408	1,028	--	--

FIGURE 36

THREE FACTOR CREW TYPE ANALYSES BY TYPE OF CREW, CREW SIZE AND TYPE OF SHIFT

AVERAGE DIRECT COST PER MAN-YEAR

Crew Type	One Man		Two Man		Three Man		Four Man	
	Task	Hourly	Task	Hourly	Task	Hourly	Task	Hourly
Residential Collection	$ 234	$103	$343	$356	$136	$355	$347	$127
Commercial Collection	1,261	154	148	102	77	56	--	207
Brush Collection	44	--	25	244	54	140	151	51
Dead Animal Collection	162	35	60	34	--	--	--	--
Paper Collection	542	7	10	--	--	--	--	--
Bulky Waste Crew	--	--	645	--	100	32	--	--
Street Cleaning	1,548	24	--	--	1	22	--	--
Residential & Commercial Combined	273	25	158	130	198	188	--	--
Manual Sweeper Crew	138	87	397	--	588	--	--	--
Brush & Bulky Waste	1,273	321	--	111	49	542	--	--

FIGURE 37

THREE FACTOR CREW TYPE ANALYSES BY TYPE OF CREW, CREW SIZE AND TYPE OF SHIFT

PERCENT OF MAN-HOURS OF EXPOSURE

Crew Type	One Man		Two Man		Three Man		Four Man	
	Task	Hourly	Task	Hourly	Task	Hourly	Task	Hourly
Residential Collection	2%	2%	11%	2%	28%	6%	4%	5%
Commercial Collection	<1%	7%	3%	1%	<1%	<1%	--	<1%
Brush Collection	<1%	<1%	<1%	<1%	<1%	2%	<1%	1%
Dead Animal Collection	<1%	<1%	<1%	<1%	--	<1%	--	--
Paper Collection	<1%	<1%	<1%	<1%	--	--	--	--
Bulky Waste Crew	<1%	--	<1%	--	<1%	1%	--	<1%
Street Cleaning	<1%	2%	--	<1%	<1%	1%	--	--
Residential & Commercial Combined	<1%	<1%	<1%	<1%	5%	2%	<1%	--
Manual Sweeper Crew	<1%	<1%	<1%	<1%	<1%	<1%	--	--
Brush & Bulky Waste	<1%	<1%	--	<1%	<1%	<1%	--	--

- OSHA incidence rate (FIGURE 31).
  - Fixed hour collection was clearly lower in OSHA incidence rate for the crew types of commercial collection, street cleaning and residential & commerical combined than task or incentive. However, this did not hold true for brush collection.
  - Several crew types had more than one injury per employee per year: one man task street cleaning, one and two man houly brush & bulky waste, and two and three man task manual sweeper crews.
- OSHA lost workday cases rate (FIGURE 32).
  - The patterns for these rates were similar to those observed for their OSHA incidence rates except that the three man hourly brush bulky waste crew was no longer high in their incidence rate.
- OSHA severity rate (FIGURE 33).
  - Several crew types lost more than 10 days per employee per year due to injuries: one man task paper collection, two man task bulky waste crew, one man task street cleaning crew, and two and three man manual sweeper crews.

  - For commercial collection, the four man hourly crews had the highest incidence rate, but the one man task crews had the highest severity rate.

  - In brush collection, the four man task crews had the highest incidence rate, but the two man hourly had the highest severity rate.

  - In dead animal collection the one man task crews had the highest incidence and severity rates.

  - In paper collection the one man task crews had the highest incidence and severity rates, and the other two types of paper collection did not result in any lost time.

  - In bulky waste collection the two man task crews had very high incidence and severity rates.

  - In street cleaning, the one man task crews had extremely high incidence and severity rates.

  - In the combined residential and commercial collection, the one and three man task crews had high incidence and severity rates.

  - For the manual sweeper crews, the two and three man crews were having about two injuries per employee per year and losing over 10 days per employee per year to injuries.

  - In the brush and bulky waste collection, although the one and two man hourly crews had high incidence rates, the three man hourly crews had the highest severity rate.

- Average workdays lost per lost workday case (FIGURE 34).

  - A wide range of workdays lost per lost workday case rates are shown, with the highest under one man commercial task collection which was 59. The next two highest categories were two man task bulky waste collection (31) and three man hourly street cleaning crews (30).

- Average direct cost per OSHA recordable injury (FIGURE 35).
  - Overall, the commercial collection crews has the highest direct cost per OSHA recordable injury, with two of their categories being over $1,000.
- Average direct cost per man-year (FIGURE 36).
  - The commercial collection crews no longer have the highest costs, although the one man task crews were still over $1,000 per employee per year.
  - Two other one man task crews had over $1,000, street cleaning and brush and bulky waste.

3.2.2 Age by Accident Type

The top five accident type categories (out of 65 accident type categories) were chosen to be analyzed in cross tabulations with the employee characteristics of age, experience, height and weight. Only frequent accident types could be used because the injury rates were calculated per 100 employees per year, and even the most frequent accident type, "overexertion involving container", only resulted in an OSHA incidence rate of 9. Therefore, to examine beyond the top five frequent accident types would mean observing small changes in the injury incidence rates of less than one.

The five accident types examined, as shown in FIGURE 38, from highest to lowest frequency were:

- overexertion involving container
- slip on same level
- struck by waste

- fall on same level
- vehicle accident

FIGURE 38 gives the injury rates of the five accident types for the collection division, which can be found on the bottom line of the EXHIBITS for each multiple factor analysis (two factors of employee characteristic and accident type). The chart shows that the highest frequency accident type category, "overexertion involving container", was the highest in incidence, severity and direct cost per man-year rates. However, the next highest category in severity and direct cost per man-year rates was the fifth highest in incidence rate, "vehicle accident".

FIGURE 38

AVERAGE INJURY RATES FOR THE FIVE MOST FREQUENT ACCIDENT TYPES

Accident Type	OSHA Incidence Rate	OSHA Lost Workday Cases Rate	OSHA Severity Rate	Avg. Workdays Lost Per Lost Workday Case	Avg. Direct Cost Per OSHA Recordable Injury	Avg. Direct Cost Per Man-Year
Overexertion involving container	9.1	7	85	12	$497	$45
Slip on same level	2.5	2	22	12	416	11
Struck by waste	2.5	1	6	6	155	4
Fall on same level	2.3	2	22	14	479	11
Vehicle accident	1.8	1	29	21	838	15

One of the Special Reports (EXHIBIT 22 in Publications volume) dealt with back strains from overexertions involving container and waste. That study concluded about the same findings as these printouts: that the younger age groups had more injuries but the older age groups had more severe injuries, and consequently also more direct costs of injuries. The report also concluded that the experience of the employees need to be examined, also.

The following discussion (Sections 3.2.2 through 3.2.6) highlight the injury rates trends of each employee characteristic for the five accident types.

Slip on same level (EXHIBITS 60A-C). In the incidence rates, the highest age group was "25-29 years", but the highest in severity rate was "45-49 years", although a smaller peak did occur at "25-29 years". Four categories were much higher than the other age categories in their average workdays lost per lost workday case, "35-39 years" and 45 through 59 years old, with the highest at "45-49 years". For the direct cost per OSHA recordable injury rates, the older age groups were much higher, particularly "45-49 years" which was one and a half times higher than the next highest cost. This age group was again the highest for the direct cost per man-year column.

Struck by waste (EXHIBITS 61A-C). The OSHA incidence rate was the highest at age group "20-24 years" and decreased steadily for the older age groups. However, the severity rate was much higher at age group "30-34 years" by one and a half times. Then a smaller peak appeared for two age groups from 55 to 64 years old. The "30-34 years" age group was again much higher than the other categories for the average workdays lost per lost workday case. The same age group was also high for both direct cost rates. However, the two older age groups of 55 to 64 years were also high.

Fall on same level (EXHIBITS 62A-C). The OSHA incidence rate shows two highs at the two extreme age groups of "<20 years" and ">64 years". However, for the OSHA lost workday cases rate, the highest occurred at "25-29 years" and steadily decreased from there. The severity rate reflected the OSHA incidence rate since the two high rates occurred at the two extreme age groups. The same pattern repeated for the average workdays lost per lost workday case. The majority of the age groups were over $400 for the average direct cost per OSHA recordable injury but the two highest costs were at older age groups, "55-59 years" and ">64 years". They were also the high categories for the direct cost per man-year.

Vehicle accident (EXHIBITS 63A-C). Both incidence rates started high with the lower age groups and dipped at "55-59 years" but increased again for ">64 years". For the severity rates, the highest age group was "50-54 years", and "<20 years" was second. "50-54 years" was again the highest in average workdays lost per lost workday case and was a third higher than the next highest rate. Several age groups had $1,500 in direct cost per OSHA recordable injury: "30-34 years", "50-54 years" and "55-59 years". The two age groups of "30-34 years" and "50-54 years" were again the highest for direct cost per man-year, but the "<20 years" group had the third highest cost rate.

3.2.3 Experience by Accident Type

Experience refers to how long the employee had been working for the solid waste organization. The experience groupings were broken into smaller increments for the first year of work experience because a previous SAFETY SCIENCES study indicated that the incidence of injuries was the highest during the first month on the job. This appears to correlate with the printouts for the five accident types by experience groupings. The findings also point to the need for employee training in the solid waste industry.

Overexertion involving container (EXHIBITS 64A-C). The incidence and severity rates show that the experience group of less than one month experience as being the worst and that with more experience the rates decreased but still remained high. The two high experience categories for severity rate were the last two, "5-10 years" and ">10 years". The average direct cost per OSHA recordable injury rates were also the highest for the last two experience groups. However, the high rates for the direct cost per man-year occurred in the more inexperienced employees. Similar findings were concluded from the Special Report on back strains from overexertion (EXHIBIT 22 in Publications volume).

Slip on same level (EXHIBITS 65A-C). The best experienced group again had the highest OSHA incidence rate, but the next group, "1-2 months", had the highest OSHA lost workday cases rate. The incidence rates decreased noticeably after three months experience. The severity rates, however, showed a different pattern. The highest severity rate occurred at "2-5 years", and the more experienced employees on the whole had higher rates. The workdays lost per lost workday case rates were also much higher for the more experienced employees. The direct cost rates also proved interesting. After two years of experience the direct cost per OSHA recordable injury doubled, and the direct cost per man-year was the highest for "2-5 years" experience.

Struck by waste (EXHIBITS 66A-C). The incidence rates were the highest for the less than three months experience employees and steadily decreased for the more experienced employees. However, the OSHA severity rate was extremely high (by more than ten times) for one experience category, "2-3 months". This category was also the highest for the average workdays lost per lost workday case, the average direct cost per OSHA recordable injury and the average direct cost per man-year.

Fall on same level (EXHIBITS 67A-C). The least experienced employees had the highest OSHA incidence and severity rates as well as the direct cost per man-year rate. However, the more experienced employees, although they had fewer injuries, had more expensive injuries since they were high for direct costs per OSHA recordable injury.

Vehicle accident (EXHIBITS 68A-C). Again, the least experienced employees had the most vehicle accidents. In addition, the first two experience categories, "<1 month" and "1-2 months", had very high OSHA severity rates (56 and 159 vs. the average of 29). The average workdays lost per lost workday case was erratic in highs and lows, although the overall rates for this accident type was considerably higher than the other accident types, indicating the severity of the vehicle accidents.

3.2.4 Height by Accident Type

The height of the injured employee may be a contributing factor to some injuries such as low back pains while lifting or dumping, depending on the height of the container and of the hopper sill in relation to the height of the employee.

Overexertion involving container (EXHIBITS 69A-C). The best height for low incidence and severity rates was less than 5'3". The worst height was 6'1"-6'2". However, 5'3"-5'4" had the highest severity rate and average workdays lost per lost workday case. This height group's injuries should be examined for the employees' activities at the time of injury. The shorter employees (5'3"-5'6") also had the highest direct cost injury rates.

Slip on same level (EXHIBITS 70A-C). The medium to tall employees appear to have more problems with the slips, and the taller than 6'4" employees had the highest severity rate, average workdays lost per lost workday case rate and direct cost rates. The shorter employees (5'3"-5'4") had the lowest injury rates for this accident type.

Struck by waste (EXHIBITS 71A-C). The height, surprisingly did affect the injury rates for this accident type, which mostly involve objects being ejected from the hopper. Therefore, the height of the employee may influence how frequently and how severely the employees get injured. The over 6'4" employees had the highest incidence of these injuries while the two shortest categories had the high severity rates. In fact, the under 5'3" employees were the highest in OSHA severity rate, workdays lost per lost workday case, and direct cost rates. This category's rates were much higher than the next higher rates, often by more than two times.

Fall on same level (EXHIBITS 72A-C). This accident type did not have the same patterns as the others, but the shorter employees tended to have higher rates than the taller employees.

Vehicle accident (EXHIBITS 73A-C). One height category, 6'3"-6'4", had consistently the highest rate of each type of injury rate. The 5'3"-5'4" category also ranked second in many of the injury rates.

3.2.5 Weight by Accident Type

As discussed in Section 3.1.4, the weight of the employee may not be a useful factor in analyzing injury rates if it is not used in conjunction with other factors such as height, job class, age, and activity.

Overexertion involving container (EXHIBITS 74A-C). The highest OSHA incidence rates occurred in the weight categories of "160-169 lbs." and "170-179 lbs.", and the "170-179 lbs." category had the highest OSHA lost workday cases rate. However, for the OSHA severity rates, the highest category was "210-219 lbs.". A different pattern emerged with the average workdays lost per lost workday case since "190-199 lbs." had the highest, which was more than one and a half times higher than the next. For both direct cost rates, the weight category of "160-169 lbs." was more than one and a half times higher than the other categories.

Slip on same level (EXHIBITS 75A-C). Higher incidence rates were shown for employees weighing over 220 lbs. In addition, the "220-229 lbs." category had a very high severity rate. The same category also was experiencing much higher direct cost rates than other weight categories.

Struck by waste (EXHIBITS 76A-C). An erratic pattern occurs for this accident type, perhaps because there may be little correlation between this accident type and the weight of the employee. The category of "240-249 lbs." had the highest OSHA incidence rate, but "190-199 lbs." had the highest OSHA severity rate, more than double the other categories (18 vs. 7). The direct cost rates, however, were the highest for the less than 130 lbs. employees.

Fall on same level (EXHIBITS 77A-C). One weight category had the highest OSHA incidence, severity and direct cost per man-year rates, "240-249 lbs.".

Vehicle accident (EXHIBITS 78A-C). No consistent pattern occurred for this accident type. The ">249 lbs." category had the highest OSHA incidence rate, but "200-209 lbs." had the highest severity rate. However, the direct cost rates show "210-219 lbs." being much higher in rates than other categories by more than two times.

3.2.6 Special Combinations

Injury rates by special combinations are also available through hand computation of data obtainable through the "master" program. For instance, the man-hours of exposure files are already set up for crew type, division, job classification, age, experience, height and weight. Therefore, to derive a combination of these with the injury description or operational factors, a special printout would be requested from the "master" program. The number of injuries, days lost and direct costs could then be used to compute OSHA incidence, severity, and direct cost rates manually.

This method was utilized in performing the injury rates computations for several of the Special Reports, most notably the personal protective equipment analyses. Individual printouts were requested for each personal protective equipment, and the applicable parts of body and natures of injury each protective equipment could guard against were specified. In addition, Section 3.1.1 of the Final Report listed some studies that could be performed with this method.

IV. FIELD TEST DATA

The Field Test injuries totaled 1,508 OSHA recordable injuries, 10,175 days lost, and $693,981 in direct costs. They were collected from 15 participants during the period of July 1973 through September 1975. During the majority of the Field Test, the injuries were collected through the use of injury report forms. Then the present IRIS method of having the participants phone in the injuries instead was tested with a few participants and proved to be successful.

As described in the Final Report the injury coding system underwent evaluation and improvement at the end of the Field Test. The changes were such that it was easier to recode the Field Test injuries rather than translate the old codes into the new through computer programming. The other problem was that the computer language had also been changed after the Field Test. The man-hours of exposure, however, had been altered too radically to use, and therefore the Field Test injuries were not used to compute injury rates.

This section will deal with the analysis of the Field Test injuries by the four accident description factors of activity, accident type, nature of injury and part of body. A discussion of how these figures compare with those of the continuation phase is included. FIGURE 39 summarizes the top three frequent categories for the four factors. FIGURE 1 on page 2-2

FIGURE 39

SUMMARY OF ACCIDENT FACTORS FOR SELECTED ACCIDENT CHARACTERISTICS WITH HIGHEST PERCENT OF OSHA RECORDABLE INJURIES OSHA DAYS LOST AND DIRECT COSTS

FIELD TEST

Reporting Period: July 1973 - September 1975

Type of Characteristic	Factors with the:		
	Highest % of OSHA Recordable Injuries	Highest % of OSHA Days Lost	Highest % of Direct Costs
Activity	Lifting or dumping container - 28% Carrying container - 9% Standing or walking - 7%	Lifting or dumping container - 26% Carrying container - 9% Standing or walking - 8%	Lifting or dumping container - 22% Riding on equipment - 10% Driving equipment - 10%
Accident Type	Overexertion involving container - 12% Fall on same level - 7% Fall to a different level - 6%	Overexertion involving container - 17% Caught between objects - 16% Fall on same level - 10%	Caught between objects - 25% Overexertion involving container - 14% Vehicle accident - 11%
Nature of Injury	Sprain or strain - 36% Cut or puncture - 20% Bruise - 17%	Sprain or strain - 41% Bruise - 14% Fracture - 14%	Sprain or strain - 41% Bruise - 16% Multiple injuries - 12%
Part of Body	Back - 16% Multiple body parts - 12% Eyes - 9%	Multiple body parts - 24% Back - 23% Fingers - 9%	Multiple body parts - 26% Back - 22% Hand - 7%

shows a similar chart for the IRIS reporting period of December 1975 to September 1977.

In reviewing the injury descriptions from the Field Test, a surprising number of serious injuries were noted. They are planned to be extracted and described in an IRIS News or IRIS Newflash issue.

Overall, the Field Test data and the IRIS data were distributed in the same fashion, with some differences pointed out.

4.1 ACTIVITY (EXHIBITS 79A-C)

The injured employees were "lifting or dumping containers" in a quarter of the injuries. This also was the high category for the more recent IRIS data; however, the IRIS data showed it to be a third higher. In addition, "carrying container" was more of a problem activity for the Field Test injuries (9%) than for the IRIS injuries (7%).

The direct cost activity categories indicate that the Field Test injuries had problems with vehicle accidents since the second and third highest categories were "riding on equipment" and "driving equipment". These two categories were the fifth and ninth highest categories in the IRIS data. This may be a reflection of driver training courses becoming a standard part of the safety training of employees.

4.2 ACCIDENT TYPE (EXHIBITS 80A-C)

There were several surprising differences in the comparison of the rankings of the accident types between the two FIGURES, although "overexertion involving container" was the highest in frequency for both. It was also 6% more frequent with the IRIS data (18% vs. 12%).

There were more falls occurring with the Field Test injuries. "Falls on the same and to a different level" resulted in 13% of the Field Test injuries while they only accounted for 9% of the IRIS data. However, this may be due to better reporting and distinction between slips and falls since "slip on same level" was the second most frequent IRIS data accident type (6%) while it was the eleventh most frequent (3%) for the Field Test data.

Greater differences are found in comparing the top three accident type categories in the Field Test with the high days lost:

	Field Test	IRIS
Overexertion involving container	17%	23%
Caught between objects	16	6
Fall on same level	10	7

There appears to be a rise in overexertions while handling containers while the "caught between object" accidents (most prominently caught in packer) appear to be less severe. This may be a result of improved technology for pinch point protection and better safe work rules concerning the operating packer panel.

The same differences were observed in comparing the direct costs:

	Field Test	IRIS
Caught between objects	25%	8%
Overexertion involving container	14	21
Vehicle accident	11	8

4.3 INJURY TYPE (EXHIBITS 81A-C)

The high nature of injury categories remained essentially the same for the Field Test as for the IRIS data. "Sprain/strains" were the most frequent by far. Cuts and punctures were also frequent but did not result in corresponding high days lost and direct costs.

The percentage distribution of the frequencies of the major injury types were also equivalent except that "sprain/strains" were more frequent in the IRIS data (41% vs. 36%). For the days lost figures, the categories were also the same except that "sprain/strains" were again higher in percentage, by 30%.

"Multiple injuries" was the third highest direct cost category for the Field Test data. This may have been due to a few severe multiple injuries (e.g., fracture and sprain) that skewed the results since this is a much smaller sample size than the IRIS data.

4.4 PART OF BODY (EXHIBIT 82)

The back received the most OSHA recordable injuries in both FIGURES, but it fell to second for the days lost and direct cost columns in the Field Test data. "Multiple body parts" became the highest, instead. The high incidence of this category may simply mean a difference in reporting methods since IRIS codes in favor of the more seriously injured body part unless more than one body part received serious injury (e.g., burn). The Field Test injury report form did not allow distinction of which body part received which injury since it was multiple choice for each factor.

EXHIBITS

EXHIBIT 1A

ALL USERS
ACTIVITIES RANKED FROM HIGHEST TO LOWEST
PERCENT OF OSHA RECORDABLE INJURIES

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: OSHA RECORDABLE CASES INCLUDE MEDICAL TREATMENT CASES (I.E. NON-FATAL CASES WITHOUT LOST WORKDAYS), LOST WORKDAY, PERMANENT DISABILITY AND FATAL CASES. FIRST AID INJURIES ARE NOT INCLUDED.

	OSHA RECORDABLE INJURIES	
ACTIVITY	NO.	%
LIFTING CONTAINER	1,138	15.06
LIFTING TO DUMP CONTAINER	873	11.55
DUMPING CONTAINER	849	11.23
GETTING OFF EQUIP	610	8.07
STANDING OR WALKING	552	7.30
CARRYING CONTAINER	517	6.84
RIDING ON EQUIP	429	5.68
PUSHING OR PULLING CONTAINER	282	3.73
LIFTING TO DUMP WASTE	253	3.35
GETTING ON EQUIP	252	3.33
DRIVING EQUIP	240	3.18
LIFTING WASTE	133	1.76
OPERATING CONTROLS	111	1.47
DOING REPETITIOUS WORK	107	1.42
DOING OTHER TYPE OF ACTIVITY	92	1.22
DUMPING WASTE	87	1.15
CLEARING WASTE W HANDTOOL	79	1.05
OPENING EQUIP PT	72	0.95
REFUELING VEH OR ROUTINE MAINT	70	0.93
REPAIRING EQUIP W HANDTOOL	65	0.86
PICKING UP LOOSE WASTE	61	0.81
DOING NO ONE ACTIVITY	58	0.77
DOING UNK ACTIVITY	47	0.62
CHECKING EQUIP MALFNCTN	46	0.61
CLOSING EQUIP PT	42	0.56
EMPTYING VEH	37	0.49
PUSHING OR PULLING WASTE	33	0.44
DIRECTING VEH	31	0.41
CARRYING WASTE	26	0.34
DISLODGING WASTE FROM VEH	25	0.33
RUNNING	24	0.32
HOOKING OR UNHOOKING EQUIP	22	0.29
TRIMMING SHRUBBERY	22	0.29
LIFTING OBJECT	21	0.28
PUSHING OR PULLING OBJECT	20	0.26
WASHING EQUIP	20	0.26
HOOKING OR UNHOOKING CONT	18	0.24
PUSHING OR PULLING VEH PT	17	0.22

OSHA RECORDABLE INJURIES

ACTIVITY	NO.	%
DISLODGING WASTE FROM CONT	15	0.20
LIFTING VEH PART	15	0.20
COMPACTING WASTE IN CONT	15	0.20
CATCHING CONT	14	0.19
ARRANGING LOAD	14	0.19
SHAKING TO DUMP CONT	13	0.17
COMPACTING WASTE IN VEH	13	0.17
UNLOADING WASTE	13	0.17
CARRYING OBJECT	12	0.16
DOING JANITORIAL WORK	11	0.15
CATCHING WASTE	10	0.13
REPAIRING CONT W HANDTOOL	10	0.13
MOWING	5	0.07
WASHING CONT	4	0.05
RIDING ON CONT	3	0.04
DOING OFFICE WORK	3	0.04
DOING HORSEPLAY	3	0.04
PUTTING OUT FIRE	3	0.04
FIGHTING	1	0.01
TOTAL	7,558	100.00

EXHIBIT 1B

ALL USERS
ACTIVITIES RANKED FROM HIGHEST TO LOWEST PERCENT OF OSHA DAYS LOST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: A LOST DAYS CASE IS ONE IN WHICH THE EMPLOYEE INCURRED WORKDAYS LOST AND/OR LIGHT DUTY DAYS DUE TO THE ACCIDENT.

	OSHA DAYS LOST		
ACTIVITY	NO.	%	AVG DAYS LOST/ LOST DAYS CASE
LIFTING CONTAINER	8,331	14.71	10.71
LIFTING TO DUMP CONTAINER	5,872	10.37	11.63
GETTING OFF EQUIP	5,478	9.67	13.63
DUMPING CONTAINER	4,561	8.05	10.30
RIDING ON EQUIP	4,370	7.71	16.68
CARRYING CONTAINER	4,349	7.68	12.18
STANDING OR WALKING	3,996	7.05	12.41
PUSHING OR PULLING CONTAINER	3,133	5.53	16.32
DRIVING EQUIP	2,414	4.26	16.31
GETTING ON EQUIP	1,948	3.44	12.49
LIFTING TO DUMP WASTE	1,277	2.25	11.82
DOING REPETITIOUS WORK	1,136	2.01	14.38
CLEARING WASTE W HANDTOOL	937	1.65	19.52
OPENING EQUIP PT	889	1.57	25.40
DOING OTHER TYPE OF ACTIVITY	741	1.31	15.44
OPERATING CONTROLS	585	1.03	10.26
LIFTING WASTE	577	1.02	8.36
PUSHING OR PULLING WASTE	426	0.75	20.29
REFUELING VEH OR ROUTINE MAINT	364	0.64	9.84
TRIMMING SHRUBBERY	359	0.63	32.64
PICKING UP LOOSE WASTE	333	0.59	11.10
EMPTYING VEH	331	0.58	25.46
CLOSING EQUIP PT	327	0.58	14.22
COMPACTING WASTE IN VEH	306	0.54	30.60
LIFTING OBJECT	249	0.44	27.67
REPAIRING EQUIP W HANDTOOL	237	0.42	9.48
DIRECTING VEH	227	0.40	13.35
DUMPING WASTE	216	0.38	7.45
CARRYING WASTE	204	0.36	14.57
ARRANGING LOAD	200	0.35	20.00
CHECKING EQUIP MALFNCTN	200	0.35	8.70
PUSHING OR PULLING OBJECT	196	0.35	12.25
DOING UNK ACTIVITY	188	0.33	9.40
PUSHING OR PULLING VEH PT	175	0.31	17.50
CATCHING WASTE	171	0.30	28.50
HOOKING OR UNHOOKING EQUIP	160	0.28	13.33
DOING NO ONE ACTIVITY	146	0.26	5.41
WASHING EQUIP	138	0.24	13.80

OSHA DAYS LOST

ACTIVITY	NO.	%	AVG DAYS LOST/ LOST DAYS CASE
HOOKING OR UNHOOKING CONT	137	0.24	15.22
CARRYING OBJECT	122	0.22	13.56
RUNNING	105	0.19	8.08
MOWING	79	0.14	15.80
LIFTING VEH PART	72	0.13	7.20
DISLODGING WASTE FROM VEH	60	0.11	5.00
SHAKING TO DUMP CONT	50	0.09	7.14
CATCHING CONT	49	0.09	6.12
DOING OFFICE WORK	40	0.07	40.00
DISLODGING WASTE FROM CONT	37	0.07	5.29
DOING JANITORIAL WORK	34	0.06	11.33
UNLOADING WASTE	34	0.06	8.50
DOING HORSEPLAY	29	0.05	14.50
COMPACTING WASTE IN CONT	19	0.03	2.37
REPAIRING CONT W HANDTOOL	18	0.03	4.50
WASHING CONT	8	0.01	2.67
FIGHTING	4	0.01	4.00
RIDING ON CONT	3	0.01	1.50
TOTAL	56,647	100.00	12.62

EXHIBIT 1C

ALL USERS
ACTIVITIES RANKED FROM HIGHEST TO LOWEST PERCENT OF DIRECT COSTS

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: OSHA RECORDABLE CASES INCLUDE MEDICAL TREATMENT CASES (I.E. NON-FATAL CASES WITHOUT LOST WORKDAYS), AND LOST WORKDAY, PERMANENT DISABILITY AND FATALITY CASES.
FIRST AID INJURIES ARE NOT INCLUDED.
DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKER'S COMPENSATION BENEFITS AND WAGE CONTINUATION BENEFITS (E.G., INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED.

	DIRECT COSTS		
ACTIVITY	AMT.	%	AVG COSTS/ OSHA REC INJ
LIFTING CONTAINER	420,934	14.15	370
LIFTING TO DUMP CONTAINER	272,725	9.17	312
GETTING OFF EQUIP	244,969	8.24	402
STANDING OR WALKING	223,430	7.51	405
CARRYING CONTAINER	214,918	7.23	416
DUMPING CONTAINER	205,677	6.91	242
RIDING ON EQUIP	195,695	6.58	456
PUSHING OR PULLING CONTAINER	155,069	5.21	550
DRIVING EQUIP	121,735	4.09	507
OPENING EQUIP PT	117,704	3.96	1,635
GETTING ON EQUIP	87,554	2.94	347
LIFTING TO DUMP WASTE	66,640	2.24	263
DOING REPETITIOUS WORK	61,550	2.07	575
DISLODGING WASTE FROM VEH	61,391	2.06	2,456
CLEARING WASTE W HANDTOOL	60,826	2.04	770
DOING OTHER TYPE OF ACTIVITY	48,447	1.63	527
OPERATING CONTROLS	46,258	1.56	417
PUSHING OR PULLING VEH PT	32,440	1.09	1,908
PUSHING OR PULLING WASTE	31,099	1.05	942
LIFTING WASTE	30,461	1.02	229
CLOSING EQUIP PT	18,684	0.63	445
EMPTYING VEH	18,086	0.61	489
TRIMMING SHRUBBERY	17,576	0.59	799
DUMPING WASTE	16,106	0.54	185
PICKING UP LOOSE WASTE	15,819	0.53	259
LIFTING OBJECT	15,659	0.53	746
REFUELING VEH OR ROUTINE MAINT	15,651	0.53	224
ARRANGING LOAD	13,699	0.46	979
REPAIRING EQUIP W HANDTOOL	11,949	0.40	184
COMPACTING WASTE IN VEH	11,845	0.40	911
CHECKING EQUIP MALFNCTN	10,088	0.34	219
CARRYING WASTE	10,062	0.34	387
PUSHING OR PULLING OBJECT	9,773	0.33	489
DOING NO ONE ACTIVITY	9,156	0.31	158
DOING UNK ACTIVITY	8,894	0.30	189
DIRECTING VEH	8,352	0.28	269

ACTIVITY	DIRECT COSTS AMT.	%	AVG COSTS/ OSHA REC INJ
HOOKING OR UNHOOKING EQUIP	8,135	0.27	370
WASHING EQUIP	7,601	0.26	380
CATCHING WASTE	7,211	0.24	721
CARRYING OBJECT	7,013	0.24	584
RUNNING	4,924	0.17	205
HOOKING OR UNHOOKING CONT	4,879	0.16	271
LIFTING VEH PART	4,013	0.13	268
SHAKING TO DUMP CONT	3,547	0.12	273
DISLODGING WASTE FROM CONT	2,878	0.10	192
UNLOADING WASTE	2,399	0.08	185
CATCHING CONT	2,157	0.07	154
MOWING	2,014	0.07	403
DOING JANITORIAL WORK	1,720	0.06	156
COMPACTING WASTE IN CONT	1,186	0.04	79
DOING HORSEPLAY	1,058	0.04	353
REPAIRING CONT W HANDTOOL	1,046	0.04	105
DOING OFFICE WORK	823	0.03	274
WASHING CONT	380	0.01	95
RIDING ON CONT	284	0.01	95
FIGHTING	184	0.01	184
PUTTING OUT FIRE	85	0.00	28
TOTAL	2,974,457	100.00	394

EXHIBIT 2A

ALL USERS
ACCIDENT TYPES RANKED FROM HIGHEST TO LOWEST PERCENT OF OSHA RECORDABLE INJURIES

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: OSHA RECORDABLE CASES INCLUDE MEDICAL TREATMENT CASES (I.E. NON-FATAL CASES WITHOUT LOST WORKDAYS), LOST WORKDAY, PERMANENT DISABILITY AND FATAL CASES. FIRST AID INJURIES ARE NOT INCLUDED.

	OSHA RECORDABLE INJURIES	
ACCIDENT TYPE	NO.	%
OVEREXERTION INVOLVING CONT	1,385	18.32
SLIP ON SAME LEVEL	423	5.60
STRUCK BY WASTE	407	5.39
FALL ON SAME LEVEL	382	5.05
VEHICLE ACCIDENT	307	4.06
FALL TO A DIFFERENT LEVEL	305	4.04
STRUCK SELF WITH CONT BEING HANDLED	302	4.00
CAUGHT BETWEEN OBJECTS	293	3.88
STRUCK AGAINST VEH PART	285	3.77
VEH MOVEMENT INVOLVED ACCIDENT	220	2.91
HURT BY HANDLING CONT	214	2.83
BODILY REACTION	214	2.83
INSECT BITE	206	2.73
WASTE PARTICLES IN EYE	205	2.71
ANIMAL BITE	174	2.30
SLIP AND STRUCK AGAINST VEH PART	171	2.26
STEPPED ON SHARP WASTE	156	2.06
OVEREXERTION INVOLVING WASTE	122	1.61
PARTICLES IN EYE	115	1.52
STRUCK BY VEH PART	105	1.39
STRUCK BY CONTAINER	99	1.31
STRUCK SELF WITH WASTE BEING HANDLED	95	1.26
STRUCK BY OBJ	94	1.24
SLIP TO A DIFFERENT LEVEL	94	1.24
HURT BY HANDLING WASTE	90	1.19
OVEREXERTION	85	1.12
STRUCK AGAINST OBJECT	84	1.11
CONTACT WITH ALLERGENIC WASTE	66	0.87
FALL AGAINST VEH PART	64	0.85
BODILY REACTION IN CATCHING CONT	62	0.82
CONTACT WITH CAUSTIC OR TOXIC SUBSTANCE	58	0.77
STEPPED ON SHARP OBJ	56	0.74
OVEREXERTION INVOLVING OBJ	54	0.71
OVEREXERTION INVOLVING VEH PART	52	0.69
DEVELOPED INJURY OVER TIME	45	0.60
STRUCK SELF WITH OBJ BEING HANDLED	43	0.57
STRUCK AGAINST CONTAINER	40	0.53
STRUCK AGAINST WASTE	33	0.44
UNKNOWN ACCIDENT TYPE	32	0.42
STRUCK SELF WITH VEH PT BEING HANDLED	28	0.37

OSHA RECORDABLE INJURIES

ACCIDENT TYPE	NO.	%
CONTACT WITH CAUSTIC OR TOXIC WASTE	28	0.37
OTHER ACCIDENT TYPE	26	0.34
EXPOSURE TO WEATHER EXTREMES	24	0.32
HURT BY HANDLING VEH PART	22	0.29
CONTACT WITH HOT SUBSTANCE	22	0.29
FALL AGAINST CONT	19	0.25
RESULT OF AGGRESSIVE ACT	18	0.24
SLIP AND STRUCK AGAINST OBJ	17	0.22
SLIP AND STRUCK AGAINST CONT	15	0.20
BODILY REACTION IN AVOIDING OBJ	15	0.20
CONTACT WITH HOT VEH PART	13	0.17
HURT BY HANDLING OBJ	12	0.16
FALL AGAINST OBJ	11	0.15
CONTACT WITH ALLERGENIC SUBSTANCE	11	0.15
CONTACT WITH HOT OBJ	7	0.09
BODILY REACTION IN CATCHING WASTE	6	0.08
BODILY REACTION IN CATCHING VEH	5	0.07
BODILY REACTION IN CATCHING OBJ	5	0.07
BODILY REACTION IN AVOIDING VEH	5	0.07
FALL AGAINST WASTE	3	0.04
BODILY REACTION IN AVOIDING CONT	3	0.04
SLIP AND STRUCK AGAINST WASTE	2	0.03
BODILY REACTION IN AVOIDING WASTE	2	0.03
FLASHBURN	1	0.01
	1	0.01
TOTAL	7,558	100.00

EXHIBIT 2B

ALL USERS
ACCIDENT TYPES RANKED FROM HIGHEST TO LOWEST
PERCENT OF OSHA DAYS LOST

REPORTION PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: A LOST DAYS CASE IS ONE IN WHICH THE EMPLOYEE INCURRED WORKDAYS LOST AND/OR LIGHT DUTY DAYS DUE TO THE ACCIDENT.

ACCIDENT TYPE	OSHA DAYS LOST NO.	%	AVG DAYS LOST/ LOST DAYS CASE
OVEREXERTION INVOLVING CONT	13,092	23.11	12.40
VEHICLE ACCIDENT	4,653	8.21	20.50
FALL TO A DIFFERENT LEVEL	4,125	7.28	19.10
FALL ON SAME LEVEL	4,087	7.21	14.75
SLIP ON SAME LEVEL	3,936	6.95	12.82
CAUGHT BETWEEN OBJECTS	3,362	5.94	18.78
VEH MOVEMENT INVOLVED ACCIDENT	2,635	4.65	18.17
BODILY REACTION	1,778	3.14	12.01
OVEREXERTION INVOLVING WASTE	1,538	2.72	17.28
SLIP TO A DIFFERENT LEVEL	1,414	2.50	18.85
STRUCK SELF WITH CONT BEING HANDLED	1,286	2.27	7.56
STRUCK AGAINST VEH PART	1,229	2.17	8.03
STRUCK BY VEH PART	1,189	2.10	20.15
HURT BY HANDLING CONT	1,094	1.93	12.29
SLIP AND STRUCK AGAINST VEH PART	983	1.74	9.27
STRUCK BY WASTE	959	1.69	6.07
OVEREXERTION INVOLVING OBJ	958	1.69	29.03
OVEREXERTION	844	1.49	13.40
OVEREXERTION INVOLVING VEH PART	806	1.42	21.21
BODILY REACTION IN CATCHING CONT	534	0.94	11.12
FALL AGAINST VEH PART	478	0.84	11.38
STRUCK BY OBJ	421	0.74	10.02
STRUCK BY CONTAINER	405	0.71	6.53
STEPPED ON SHARP WASTE	348	0.61	5.80
FALL AGAINST CONT	323	0.57	21.53
DEVELOPED INJURY OVER TIME	322	0.57	11.10
HURT BY HANDLING WASTE	279	0.49	9.96
STRUCK AGAINST OBJECT	267	0.47	6.07
STRUCK SELF WITH WASTE BEING HANDLED	266	0.47	6.33
BODILY REACTION IN AVOIDING OBJ	262	0.46	23.82
UNKNOWN ACCIDENT TYPE	231	0.41	16.50
OTHER ACCIDENT TYPE	177	0.31	12.64
STRUCK AGAINST CONTAINER	163	0.29	7.09
WASTE PARTICLES IN EYE	160	0.28	2.71
INSECT BITE	147	0.26	2.67
PARTICLES IN EYE	146	0.26	3.40
SLIP AND STRUCK AGAINST CONT	140	0.25	14.00
EXPOSURE TO WEATHER EXTREMES	130	0.23	8.67
BODILY REACTION IN CATCHING WASTE	127	0.22	25.40
CONTACT WITH ALLERGENIC WASTE	119	0.21	5.17
ANIMAL BITE	102	0.18	2.68
BODILY REACTION IN CATCHING OBJ	94	0.17	23.50

OSHA DAYS LOST

ACCIDENT TYPE	NO.	%	AVG DAYS LOST/ LOST DAYS CASE
BODILY REACTION IN AVOIDING WASTE	94	0.17	47.00
RESULT OF AGGRESSIVE ACT	91	0.16	7.00
CONTACT WITH CAUSTIC OR TOXIC SUBSTANCE	88	0.16	3.03
CONTACT WITH HOT OBJ	73	0.13	14.60
STEPPED ON SHARP OBJ	73	0.13	3.48
STRUCK SELF WITH OBJ BEING HANDLED	72	0.13	4.24
CONTACT WITH HOT SUBSTANCE	67	0.12	5.58
CONTACT WITH CAUSTIC OR TOXIC WASTE	62	0.11	4.13
FALL AGAINST OBJ	55	0.10	7.86
HURT BY HANDLING VEH PART	50	0.09	7.14
SLIP AND STRUCK AGAINST OBJ	50	0.09	8.33
STRUCK AGAINST WASTE	46	0.08	3.54
STRUCK SELF WITH VEH PT BEING HANDLED	40	0.07	8.00
BODILY REACTION IN AVOIDING VEH	40	0.07	10.00
HURT BY HANDLING OBJ	31	0.05	10.33
BODILY REACTION IN CATCHING VEH	29	0.05	7.25
CONTACT WITH HOT VEH PART	26	0.05	4.33
BODILY REACTION IN AVOIDING CONT	25	0.04	12.50
FALL AGAINST WASTE	12	0.02	6.00
CONTACT WITH ALLERGENIC SUBSTANCE	9	0.02	4.50
SLIP AND STRUCK AGAINST WASTE	5	0.01	5.00
TOTAL	56,647	100.00	12.62

EXHIBIT 2C

ALL USERS
ACCIDENT TYPES RANKED FROM HIGHEST TO LOWEST PERCENT OF DIRECT COSTS

EPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

EFINITIONS: OSHA RECORDABLE CASES INCLUDE MEDICAL TREATMENT
ASES (I.E. NON-FATAL CASES WITHOUT LOST WORKDAYS), AND LOST WORKDAY,
ERMANENT DISABILITY AND FATAL CASES. FIRST AID INJURIES ARE NOT INCLUDED.
IRECT COSTS INCLUDE MEDICAL EXPENSES, WORKER'S COMPENSATION BENEFITS AND
AGE CONTINUATION BENEFITS (E.G., INJURY LEAVE) ONLY. INDIRECT COSTS
RE NOT INCLUDED.

ACCIDENT TYPE	DIRECT COSTS AMOUNT	%	AVG COSTS/ OSHA REC INJ
VEREXERTION INVOLVING CONT	625,823	21.04	452
EHICLE ACCIDENT	251,209	8.45	818
AUGHT BETWEEN OBJECTS	238,983	8.03	816
ALL TO A DIFFERENT LEVEL	212,618	7.15	697
ALL ON SAME LEVEL	194,946	6.55	510
LIP ON SAME LEVEL	186,387	6.27	441
TRUCK BY VEH PART	125,479	4.22	1,195
EH MOVEMENT INVOLVED ACCIDENT	107,354	3.61	488
TRUCK SELF WITH CONT BEING HANDLED	74,682	2.51	247
VEREXERTION INVOLVING WASTE	72,956	2.45	598
ODILY REACTION	72,693	2.44	340
TRUCK BY WASTE	62,244	2.09	153
TRUCK AGAINST VEH PART	58,370	1.96	205
IP TO A DIFFERENT LEVEL	54,295	1.83	578
TRUCK BY OBJ	49,923	1.68	531
VEREXERTION	48,941	1.65	576
URT BY HANDLING CONT	47,041	1.58	220
IP AND STRUCK AGAINST VEH PART	43,718	1.47	256
VEREXERTION INVOLVING OBJ	43,013	1.45	797
VEREXERTION INVOLVING VEH PART	42,490	1.43	817
ALL AGAINST CONT	26,473	0.89	1,393
ODILY REACTION IN CATCHING CONT	24,938	0.84	402
TEPPED ON SHARP WASTE	23,474	0.79	150
ALL AGAINST VEH PART	22,259	0.75	348
TRUCK AGAINST OBJECT	18,845	0.63	224
URT BY HANDLING WASTE	16,133	0.54	179
NKNOWN ACCIDENT TYPE	15,679	0.53	490
TRUCK BY CONTAINER	15,585	0.52	157
ASTE PARTICLES IN EYE	15,528	0.52	76
EVELOPED INJURY OVER TIME	15,131	0.51	336
SECT BITE	12,461	0.42	60
RUCK SELF WITH WASTE BEING HANDLED	12,410	0.42	131
IMAL BITE	10,668	0.36	61
ODILY REACTION IN AVOIDING OBJ	10,351	0.35	690
RUCK AGAINST CONTAINER	10,206	0.34	255
RTICLES IN EYE	9,144	0.31	80

ACCIDENT TYPE	DIRECT COSTS AMOUNT	%	AVG COSTS/ OSHA REC INJ
OTHER ACCIDENT TYPE	8,369	0.28	322
BODILY REACTION IN CATCHING WASTE	7,705	0.26	1,284
EXPOSURE TO WEATHER EXTREMES	7,189	0.24	300
SLIP AND STRUCK AGAINST CONT	7,147	0.24	476
CONTACT WITH CAUSTIC OR TOXIC SUBSTANCE	7,147	0.24	123
CONTACT WITH ALLERGENIC WASTE	5,693	0.19	86
BODILY REACTION IN AVOIDING WASTE	5,151	0.17	2,576
STRUCK SELF WITH OBJ BEING HANDLED	5,072	0.17	118
STEPPED ON SHARP OBJ	4,619	0.16	82
HURT BY HANDLING VEH PART	4,578	0.15	208
RESULT OF AGGRESSIVE ACT	4,451	0.15	247
BODILY REACTION IN CATCHING OBJ	4,302	0.14	860
CONTACT WITH CAUSTIC OR TOXIC WASTE	3,634	0.12	130
STRUCK SELF WITH VEH PT BEING HANDLED	3,349	0.11	120
CONTACT WITH HOT OBJ	3,248	0.11	464
STRUCK AGAINST WASTE	3,180	0.11	96
FALL AGAINST OBJ	2,949	0.10	268
SLIP AND STRUCK AGAINST OBJ	2,523	0.08	148
CONTACT WITH HOT SUBSTANCE	2,490	0.08	113
BODILY REACTION IN AVOIDING VEH	2,049	0.07	410
HURT BY HANDLING OBJ	1,691	0.06	141
BODILY REACTION IN CATCHING VEH	1,576	0.05	315
BODILY REACTION IN AVOIDING CONT	1,367	0.05	456
CONTACT WITH HOT VEH PART	1,120	0.04	86
CONTACT WITH ALLERGENIC SUBSTANCE	666	0.02	61
FALL AGAINST WASTE	403	0.01	134
SLIP AND STRUCK AGAINST WASTE	296	0.01	148
FLASHBURN	25	0.00	25
	20	0.00	20
TOTAL	2,974,457	100.00	394

EXHIBIT 3A

PAGE 1

ALL USERS
ACCIDENT SITES RANKED FROM HIGHEST TO LOWEST
PERCENT OF OSHA RECORDABLE INJURIES

EPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

EFINITIONS: OSHA RECORDABLE CASES INCLUDE MEDICAL TREATMENT CASES
I.E. NON-FATAL CASES WITHOUT LOST WORKDAYS), LOST WORKDAY,
ERMANENT DISABILITY AND FATAL CASES. FIRST AID INJURIES ARE NOT INCLUDED.

	OSHA RECORDABLE INJURIES	
ACCIDENT SITE	NO.	%
ON COLLECTION ROUTE		
IN STREET AT BACK OF TRUCK	1,847	24.44
IN ST AT CURB	907	12.00
IN CUSTOMER'S YD	795	10.52
IN ALLEY AT BACK OF TRUCK	730	9.66
ON STEP OF VEH	444	5.87
IN ALLEY AT CURB	335	4.43
INSIDE CAB OF VEH	317	4.19
IN CUSTOMER'S DRIVEWAY	213	2.82
ON RUNNING BOARD	191	2.53
ON VEHICLE	112	1.48
IN MIDALLEY	104	1.38
IN MIDSTREET	99	1.31
ON SIDEWALK	61	0.81
IN ST AT FRONT OF TRUCK	35	0.46
ON TRUCK BED	25	0.33
IN ALLEY AT FRONT OF TRUCK	20	0.26
IN CUSTOMER'S RESIDENCE	10	0.13
SUBTOTAL	6,505	86.07
ENROUTE BETWEEN SITES		
INSIDE CAB	61	0.81
ON STEP OF VEH	6	0.08
ON TRUCK BED	3	0.04
ON VEHICLE	1	0.01
ON RUNNING BOARD	1	0.01
SUBTOTAL	74	0.98
AT LANDFILL		
NEXT TO VEH AT DUMP SITE	109	1.44
AT DUMP SITE	55	0.73
IN YARD	41	0.54
ON VEHICLE	33	0.44
INSIDE CAB OF VEH	33	0.44
NEXT TO VEH	30	0.40
IN SHOP/GARAGE	14	0.19
ON STEP OF VEH	8	0.11
INSIDE CAB ENROUTE TO DUMP SITE	8	0.11
ON RUNNING BOARD	6	0.08

OSHA RECORDABLE INJURIES

ACCIDENT SITE	NO.	%
IN OFFICE/GATEHOUSE	6	0.08
INSIDE CAB AT DUMP SITE	6	0.08
ON STEP AT DUMP SITE	6	0.08
ON TRUCK BED	5	0.07
ON TRUCK BED AT DUMP SITE	3	0.04
ON RUNNING BOARD AT DUMP SITE	2	0.03
ENROUTE TO DUMP SITE	2	0.03
SUBTOTAL	397	5.25
AT INCINERATOR		
IN PLANT	22	0.29
IN SHOP/GARAGE	19	0.25
AT DUMPING FLOOR	14	0.19
IN YARD	10	0.13
ON VEHICLE	5	0.07
NEXT TO VEH	5	0.07
ON VEHICLE AT DUMPING FLOOR	4	0.05
NEXT TO VEH AT DUMPING FLOOR	4	0.05
ON STEP OF VEH	3	0.04
IN OFFICE/GATEHOUSE	3	0.04
INSIDE CAB OF VEH	2	0.03
ON TRUCK BED	2	0.03
INSIDE CAB AT DUMPING FLOOR	2	0.03
ON RUNNING BOARD AT DUMPING FLOOR	1	0.01
SUBTOTAL	102	1.35
AT TRANSFER STATION		
NEXT TO VEHICLE	16	0.21
IN.YARD	10	0.13
ON TRUCK BED	4	0.05
ON VEHICLE	3	0.04
INSIDE CAB OF VEH	3	0.04
ON RUNNING BOARD	2	0.03
SUBTOTAL	48	0.64
AT RECYCLING STATION		
IN PLANT	3	0.04
IN YARD	2	0.03
NEXT TO VEH	1	0.01
ON RUNNING BOARD	1	0.01
SUBTOTAL	7	0.09
AT HEADQUARTERS		
IN SHOP/GARAGE	138	1.83
IN YARD PARKING LOT	105	1.39
IN OFFICE	22	0.29
ON VEHICLE	19	0.25
NEXT TO VEH	15	0.20

OSHA RECORDABLE INJURIES

ACCIDENT SITE	NO.	%
AT REFUELING STATION	12	0.16
AT WASHRACK	10	0.13
INSIDE CAB OF VEH	7	0.09
ON RUNNING BOARD	4	0.05
ON STEP OF VEH	2	0.03
IN TRUCK BED	1	0.01
SUBTOTAL	344	4.55
IN ROADWAY/FIELD		
SUBTOTAL	30	0.40
AT OTHER SITE		
AT UNKNOWN SITE	39	0.52
SUBTOTAL	51	0.67
TOTAL	7,558	100.00

EXHIBIT 3B

ALL USERS
ACCIDENT SITES RANKED FROM HIGHEST TO LOWEST PERCENT OF OSHA DAYS LOST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: A LOST DAYS CASE IS ONE IN WHICH THE EMPLOYEE INCURRED WORKDAYS LOST AND/OR LIGHT DUTY DAYS DUE TO THE ACCIDENT.

ACCIDENT SITE	OSHA DAYS LOST NO.	%	AVG DAYS LOST/ LOST DAYS CASE
ON COLLECTION ROUTE			
IN STREET AT BACK OF TRUCK	13,385	23.63	11.64
IN ST AT CURB	7,316	12.92	11.80
IN CUSTOMER'S YD	4,918	8.68	9.53
ON STEP OF VEH	4,204	7.42	14.30
IN ALLEY AT BACK OF TRUCK	3,567	6.30	11.78
INSIDE CAB OF VEH	2,610	4.61	12.79
IN CUSTOMER'S DRIVEWAY	2,302	4.06	16.56
IN ALLEY AT CURB	1,546	2.73	11.28
IN MIDSTREET	1,430	2.52	20.43
ON RUNNING BOARD	1,318	2.33	12.32
ON VEHICLE	666	1.18	10.41
ON SIDEWALK	661	1.17	15.74
IN MIDALLEY	615	1.09	10.98
ON TRUCK BED	282	0.50	16.59
IN ST AT FRONT OF TRUCK	186	0.33	13.29
IN ALLEY AT FRONT OF TRUCK	69	0.12	7.67
IN CUSTOMER'S RESIDENCE	34	0.06	4.86
SUBTOTAL	47,064	83.08	12.07
ENROUTE BETWEEN SITES			
INSIDE CAB	1,139	2.01	26.49
ON STEP OF VEH	107	0.19	26.75
ON RUNNING BOARD	13	0.02	13.00
ON VEHICLE	2	0.00	2.00
SUBTOTAL	1,287	2.27	25.24
AT LANDFILL			
NEXT TO VEH AT DUMP SITE	1,202	2.12	24.04
INSIDE CAB ENROUTE TO DUMP SITE	378	0.67	54.00
INSIDE CAB OF VEH	290	0.51	14.50
AT DUMP SITE	261	0.46	11.35
ON VEHICLE	217	0.38	9.86
IN YARD	160	0.28	8.89
IN OFFICE/GATEHOUSE	147	0.26	36.75
NEXT TO VEH	134	0.24	7.88
IN SHOP/GARAGE	92	0.16	15.33
ENROUTE TO DUMP SITE	52	0.09	26.00
ON STEP OF VEH	45	0.08	9.00
ON TRUCK BED AT DUMP SITE	33	0.06	11.00

OSHA DAYS LOST

ACCIDENT SITE	NO.	%	AVG DAYS LOST/ LOST DAYS CASE
ON STEP AT DUMP SITE	26	0.05	6.50
INSIDE CAB AT DUMP SITE	21	0.04	7.00
ON RUNNING BOARD	12	0.02	12.00
ON TRUCK BED	6	0.01	6.00
ON RUNNING BOARD AT DUMP SITE	1	0.00	1.00
SUBTOTAL	3,174	5.60	15.56
AT INCINERATOR			
IN PLANT	451	0.80	25.06
AT DUMPING FLOOR	327	0.58	32.70
IN SHOP/GARAGE	119	0.21	10.82
ON TRUCK BED	87	0.15	43.50
ON VEHICLE AT DUMPING FLOOR	55	0.10	55.00
IN YARD	47	0.08	6.71
ON VEHICLE	30	0.05	7.50
IN OFFICE/GATEHOUSE	29	0.05	29.00
ON STEP OF VEH	22	0.04	11.00
NEXT TO VEH AT DUMPING FLOOR	22	0.04	7.33
NEXT TO VEH	11	0.02	3.67
INSIDE CAB AT DUMPING FLOOR	10	0.02	10.00
ON RUNNING BOARD AT DUMPING FLOOR	8	0.01	8.00
INSIDE CAB OF VEH	3	0.01	3.00
SUBTOTAL	1,242	2.19	18.26
AT TRANSFER STATION			
NEXT TO VEHICLE	102	0.18	12.75
INSIDE CAB OF VEH	55	0.10	18.33
ON TRUCK BED	23	0.04	7.67
ON RUNNING BOARD	19	0.03	9.50
IN YARD	17	0.03	5.67
ON VEHICLE	7	0.01	7.00
SUBTOTAL	232	0.41	10.09
AT RECYCLING STATION			
IN PLANT	44	0.08	22.00
ON RUNNING BOARD	15	0.03	15.00
IN YARD	9	0.02	9.00
SUBTOTAL	68	0.12	17.00
AT HEADQUARTERS			
IN YARD PARKING LOT	1,430	2.52	22.34
IN SHOP/GARAGE	959	1.69	12.96
NEXT TO VEH	179	0.32	17.90
ON VEHICLE	173	0.31	12.36
IN OFFICE	99	0.17	11.00
ON RUNNING BOARD	86	0.15	28.67
INSIDE CAB OF VEH	43	0.08	8.60

AT REFUELING STATION	37	0.07	7.40
AT WASHRACK	25	0.04	5.00
ON STEP OF VEH	6	0.01	3.00
IN TRUCK BED	3	0.01	3.00
SUBTOTAL	3,060	5.40	15.53
IN ROADWAY/FIELD			
SUBTOTAL	175	0.31	11.67

OSHA DAYS LOST

ACCIDENT SITE	NO.	%	AVG DAYS LOST/ LOST DAYS CASE
AT OTHER SITE			
AT UNKNOWN SITE	204	0.36	9.27
SUBTOTAL	345	0.61	11.90
TOTAL	56,647	100.00	12.62

EXHIBIT 3C

ALL USERS
ACCIDENT SITES RANKED FROM HIGHEST TO LOWEST
PERCENT OF DIRECT COSTS

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: OSHA RECORDABLE CASES INCLUDE MEDICAL TREATMENT CASES (I.E. NON-FATAL CASES WITHOUT LOST WORKDAYS), AND LOST WORKDAY, PERMANENT DISABILITY AND FATALITY CASES.
FIRST AID INJURIES ARE NOT INCLUDED.
DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKER'S COMPENSATION BENEFITS AND WAGE CONTINUATION BENEFITS (E.G., INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED.

INSTRUCTIONS: DETERMINE YOUR ORGANIZATION'S PROBLEM AREAS BY IDENTIFYING THE AREAS WITH THE HIGHEST PERCENTAGES.

ACCIDENT SITE	DIRECT COSTS		
	AMOUNT	%	AVG COSTS/ OSHA REC INJ
ON COLLECTION ROUTE			
IN STREET AT BACK OF TRUCK	660,732	22.21	357
IN ST AT CURB	375,120	12.61	413
IN CUSTOMER'S YD	240,559	8.09	302
IN ALLEY AT BACK OF TRUCK	195,429	6.57	267
ON STEP OF VEH	179,808	6.05	404
INSIDE CAB OF VEH	133,123	4.48	419
IN CUSTOMER'S DRIVEWAY	116,291	3.91	545
IN ALLEY AT CURB	84,437	2.84	252
ON RUNNING BOARD	66,544	2.24	348
IN MIDSTREET	62,412	2.10	630
ON VEHICLE	43,661	1.47	389
IN MIDALLEY	41,807	1.41	401
ON SIDEWALK	36,813	1.24	603
ON TRUCK BED	13,378	0.45	535
IN ST AT FRONT OF TRUCK	9,046	0.30	258
IN ALLEY AT FRONT OF TRUCK	2,690	0.09	134
IN CUSTOMER'S RESIDENCE	1,808	0.06	180
SUBTOTAL	2,368,491	79.63	364
ENROUTE BETWEEN SITES			
INSIDE CAB	51,685	1.74	847
ON STEP OF VEH	3,060	0.10	510
ON RUNNING BOARD	298	0.01	298
ON TRUCK BED	181	0.01	60
ON VEHICLE	111	0.00	111
SUBTOTAL	56,922	1.91	769
AT LANDFILL			
NEXT TO VEH AT DUMP SITE	135,097	4.54	1,239
ON VEHICLE	67,293	2.26	2,039
INSIDE CAB ENROUTE TO DUMP SITE	17,860	0.60	2,232
INSIDE CAB OF VEH	14,824	0.50	449

DIRECT COSTS

ACCIDENT SITE	AMOUNT	%	AVG COSTS/ OSHA REC INJ
AT DUMP SITE	13,300	0.45	241
IN YARD	9,573	0.32	233
IN OFFICE/GATEHOUSE	9,058	0.30	1,509
NEXT TO VEH	8,127	0.27	270
ON STEP OF VEH	3,701	0.12	462
ENROUTE TO DUMP SITE	3,462	0.12	1,731
IN SHOP/GARAGE	3,247	0.11	231
ON TRUCK BED AT DUMP SITE	2,078	0.07	692
ON STEP AT DUMP SITE	2,067	0.07	344
INSIDE CAB AT DUMP SITE	1,246	0.04	207
ON RUNNING BOARD	667	0.02	111
ON TRUCK BED	552	0.02	110
ON RUNNING BOARD AT DUMP SITE	288	0.01	144
SUBTOTAL	297,023	9.99	748
AT INCINERATOR			
IN PLANT	22,176	0.75	1,008
AT DUMPING FLOOR	7,598	0.26	542
IN SHOP/GARAGE	6,918	0.23	364
ON TRUCK BED	3,368	0.11	1,684
IN OFFICE/GATEHOUSE	3,111	0.10	1,037
ON VEHICLE AT DUMPING FLOOR	2,421	0.08	605
IN YARD	1,768	0.06	176
NEXT TO VEH AT DUMPING FLOOR	1,108	0.04	277
ON STEP OF VEH	889	0.03	296
ON VEHICLE	790	0.03	158
NEXT TO VEH	703	0.02	140
INSIDE CAB OF VEH	490	0.02	245
ON RUNNING BOARD AT DUMPING FLOOR	350	0.01	350
INSIDE CAB AT DUMPING FLOOR	305	0.01	152
SUBTOTAL	52,604	1.77	516
AT TRANSFER STATION			
NEXT TO VEHICLE	4,538	0.15	283
INSIDE CAB OF VEH	2,053	0.07	684
ON TRUCK BED	1,257	0.04	314
IN YARD	1,051	0.04	105
ON RUNNING BOARD	727	0.02	363
ON VEHICLE	478	0.02	159
SUBTOTAL	10,750	0.36	224
AT RECYCLING STATION			
IN PLANT	2,486	0.08	828
ON RUNNING BOARD	473	0.02	473
IN YARD	378	0.01	189
NEXT TO VEH	75	0.00	75
SUBTOTAL	3,412	0.11	487
AT HEADQUARTERS			
IN YARD PARKING LOT	81,266	2.73	773
IN SHOP/GARAGE	47,324	1.59	342

DIRECT COSTS

ACCIDENT SITE	AMOUNT	%	AVG COSTS/ OSHA REC INJ
ON VEHICLE	8,775	0.30	461
NEXT TO VEH	8,289	0.28	552
IN OFFICE	4,055	0.14	184
ON RUNNING BOARD	3,006	0.10	751
AT REFUELING STATION	2,171	0.07	180
INSIDE CAB OF VEH	1,714	0.06	244
AT WASHRACK	1,345	0.05	134
ON STEP OF VEH	602	0.02	301
IN TRUCK BED	284	0.01	284
SUBTOTAL	160,742	5.40	467
IN ROADWAY/FIELD			
SUBTOTAL	6,294	0.21	210
AT OTHER SITE			
AT UNKNOWN SITE	10,854	0.36	278
SUBTOTAL	18,219	0.61	357
TOTAL	2,974,457	100.00	394

EXHIBIT 4A

ALL USERS
INJURY TYPES RANKED FROM HIGHEST TO LOWEST
PERCENT OF OSHA RECORDABLE INJURIES

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: OSHA RECORDABLE CASES INCLUDE MEDICAL TREATMENT CASES (I.E. NON-FATAL CASES WITHOUT LOST WORKDAYS), LOST WORKDAY, PERMANENT DISABILITY AND FATAL CASES. FIRST AID INJURIES ARE NOT INCLUDED.

	OSHA RECORDABLE INJURIES	
TYPE OF INJURY	NO.	%
SPRAIN OR STRAIN	3,101	41.03
BRUISE	1,495	19.78
CUT/PUNCTURE	1,386	18.34
IRRITATION	394	5.21
STING	193	2.55
FRACTURE	190	2.51
UNKNOWN TYPE OF INJURY	144	1.91
ABRASIONS	138	1.83
DERMATITIS	83	1.10
CHEMICAL BURN	58	0.77
BURN FROM HEAT	55	0.73
OTHER TYPE OF INJURY	51	0.67
MULTIPLE INJURIES	41	0.54
POISONING OR ALLERGIC REACTION	40	0.53
INFECTION	34	0.45
DISLOCATION	24	0.32
ASPHYXIATION OR DROWNING	20	0.26
INFLAMMATION OF THE JOINTS	18	0.24
HERNIA	17	0.22
AMPUTATION	14	0.19
CONCUSSION	13	0.17
HEAT STROKE,EXHAUSTION OR CRAMPS	13	0.17
FROSTBITE OR OTHER LOW TEMP EFFECT	11	0.15
DENTAL INJURY	9	0.12
TORN CARTILAGE	6	0.08
NOSEBLEED	3	0.04
HEART ATTACK	2	0.03
AVULSION	1	0.01
BLINDNESS IN BOTH EYES	1	0.01
CONTAGIOUS DISEASE	1	0.01
ELECTRIC SHOCK	1	0.01
PARALYSIS	1	0.01
TOTAL	7,558	100.00

EXHIBIT 4B

ALL USERS
INJURY TYPES RANKED FROM HIGHEST TO LOWEST
PERCENT OF OSHA DAYS LOST

EPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

EFINITIONS: A LOST DAYS CASE IS ONE IN WHICH THE EMPLOYEE INCURRED ORKDAYS LOST AND/OR LIGHT DUTY DAYS DUE TO THE ACCIDENT.

TYPE OF INJURY	OSHA DAYS LOST		AVG DAYS LOST/ LOST DAYS CASE
	NO.	%	
PRAIN OR STRAIN	30,680	54.16	13.33
RUISE	7,728	13.75	8.85
RACTURE	5,945	10.49	35.81
UT/PUNCTURE	4,035	7.12	7.53
MPUTATION	1,147	2.02	81.93
NKNOWN TYPE OF INJURY	1,046	1.85	11.25
ISLOCATION	1,004	1.77	47.81
ULTIPLE INJURIES	832	1.47	24.47
THER TYPE OF INJURY	608	1.07	23.38
ERNIA	519	0.92	34.60
ONCUSSION	382	0.67	38.20
ARALYSIS	368	0.65	368.00
NFLAMMATION OF THE JOINTS	322	0.57	21.47
RRITATION	301	0.53	2.57
BRASIONS	281	0.50	5.30
HEMICAL BURN	257	0.45	9.52
ORN CARTILAGE	226	0.40	37.67
URN FROM HEAT	206	0.36	6.24
NFECTION	135	0.24	7.94
TING	131	0.23	2.73
ROSTBITE OR OTHER LOW TEMP EFFECT	105	0.19	13.12
OISONING OR ALLERGIC REACTION	104	0.18	5.78
ERMATITIS	93	0.16	3.58
EART ATTACK	40	0.07	40.00
SPHYXIATION OR DROWNING	30	0.05	2.50
VULSION	25	0.04	25.00
EAT STROKE,EXHAUSTION OR CRAMPS	25	0.04	3.57
OSEBLEED	6	0.01	3.00
ONTAGIOUS DISEASE	5	0.01	5.00
ENTAL INJURY	1	0.00	1.00
OTAL	56,647	100.00	12.62

EXHIBIT 4C

ALL USERS
INJURY TYPES RANKED FROM HIGHEST TO LOWEST
PERCENT OF DIRECT COSTS

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: OSHA RECORDABLE CASES INCLUDE MEDICAL TREATMENT CASES (I.E. NON-FATAL CASES WITHOUT LOST WORKDAYS), AND LOST WORKDAY, PERMANENT DISABILITY AND FATALITY CASES.
FIRST AID INJURIES ARE NOT INCLUDED.
DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKER'S COMPENSATION BENEFITS AND WAGE CONTINUATION BENEFITS (E.G., INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED.

TYPE OF INJURY	DIRECT COSTS AMT.	DIRECT COSTS %	AVG COSTS/ OSHA REC INJ
SPRAIN OR STRAIN	1465,173	49.26	472
BRUISE	387,183	13.02	259
FRACTURE	300,029	10.09	1,579
CUT/PUNCTURE	227,369	7.64	164
AMPUTATION	109,007	3.66	7,786
MULTIPLE INJURIES	103,911	3.49	2,534
PARALYSIS	88,642	2.98	88,642
UNKNOWN TYPE OF INJURY	43,575	1.46	303
DISLOCATION	36,255	1.22	1,511
OTHER TYPE OF INJURY	30,772	1.03	603
IRRITATION	28,597	0.96	73
HERNIA	26,658	0.90	1,568
INFLAMMATION OF THE JOINTS	18,644	0.63	1,036
ABRASIONS	18,361	0.62	133
CONCUSSION	16,878	0.57	1,298
CHEMICAL BURN	13,462	0.45	232
STING	11,195	0.38	58
TORN CARTILAGE	8,979	0.30	1,497
BURN FROM HEAT	8,937	0.30	162
INFECTION	7,362	0.25	217
DERMATITIS	6,140	0.21	74
FROSTBITE OR OTHER LOW TEMP EFFECT	5,332	0.18	485
POISONING OR ALLERGIC REACTION	4,782	0.16	120
ASPHYXIATION OR DROWNING	2,136	0.07	107
HEAT STROKE,EXHAUSTION OR CRAMPS	1,855	0.06	143
AVULSION	917	0.03	917
HEART ATTACK	845	0.03	422
DENTAL INJURY	784	0.03	87
NOSEBLEED	390	0.01	130
CONTAGIOUS DISEASE	245	0.01	245
ELECTRIC SHOCK	24	0.00	24
BLINDNESS IN BOTH EYES	20	0.00	20
TOTAL	2974,457	100.00	394

EXHIBIT 5

ALL USERS
PARTS OF BODY INJURED RANKED FROM HIGHEST TO LOWEST PERCENT OF OSHA RECORDABLE INJURIES, WORKDAYS LOST AND DIRECT COSTS

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: OSHA RECORDABLE CASES INCLUDE MEDICAL TREATMENT CASES (I.E. NON-FATAL CASES WITHOUT LOST WORKDAYS), LOST WORKDAY, PERMANENT DISABILITY AND FATALITY CASES. FIRST AID INJURIES ARE NOT INCLUDED.
DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKER'S COMPENSATION BENEFITS AND WAGE CONTINUATION BENEFITS (E.G., INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED.

OSHA RECORDABLE INJURIES PART OF BODY	OSHA REC INJ NO.	OSHA REC INJ %	OSHA DAYS LOST PART OF BODY	DAYS LOST NO.	DAYS LOST %	AVG/LOST DAYS CASE	DIRECT COSTS PART OF BODY	DIRECT COSTS AMT.	DIRECT COSTS %	AVG COSTS/ OSHA REC INJ
BACK	1,477	19.54	BACK	18,340	32.38	15.72	BACK	882,186	29.66	597
LEG	608	8.04	LEG	3,882	6.85	12.09	MULTIPLE BODY PARTS	281,168	9.45	1,255
EYES	581	7.69	ANKLE	3,773	6.66	11.10	LEG	240,829	8.10	396
ANKLE	474	6.27	KNEE	3,556	6.28	12.39	KNEE	184,171	6.19	418
FINGERS	445	5.89	MULTIPLE BODY PARTS	3,312	5.85	23.00	ANKLE	161,914	5.44	342
KNEE	441	5.83	SHOULDER	3,112	5.49	11.36	SHOULDER	153,599	5.16	357
SHOULDER	430	5.69	FOOT	2,594	4.58	10.33	FOOT	138,765	4.67	324
FOOT	428	5.66	FINGERS	2,411	4.26	12.00	HAND	118,822	3.99	308
ARM	393	5.20	HAND	2,378	4.20	12.01	FINGERS	111,122	3.74	250
HAND	386	5.11	ARM	1,687	2.98	9.48	ARM	94,425	3.17	240
MULTIPLE BODY PARTS	224	2.96	WRIST	1,575	2.78	12.60	WRIST	81,072	2.73	386
WRIST	210	2.78	CHEST	1,505	2.66	13.44	CHEST	74,857	2.52	416
CHEST	180	2.38	NECK	1,301	2.30	16.06	NECK	57,807	1.94	438
ELBOW	156	2.06	ABDOMEN	935	1.65	10.33	ABDOMEN	56,089	1.89	652
NECK	132	1.75	GROIN	900	1.59	10.47	EYES	49,773	1.67	86
GROIN	128	1.69	TOES	827	1.46	15.60	GROIN	47,342	1.59	370
THUMB	113	1.50	ELBOW	780	1.38	9.40	TOES	35,569	1.20	462
HIPS	98	1.30	HIPS	702	1.24	11.32	ELBOW	34,839	1.17	223
ABDOMEN	86	1.14	EYES	570	1.01	2.97	HIPS	31,525	1.06	322
TOES	77	1.02	SCALP	498	0.88	13.83	SKULL	24,447	0.82	843
SCALP	71	0.94	SKULL	461	0.81	28.81	SCALP	23,786	0.80	335
FACE	69	0.91	THUMB	452	0.80	8.53	THUMB	23,030	0.77	204
INTERNAL ORGANS	59	0.78	TRUNK	259	0.46	7.40	FACE	14,151	0.48	205
FOREHEAD	54	0.71	INTERNAL ORGANS	229	0.40	7.39	TRUNK	12,476	0.42	250
TRUNK	50	0.66	FACE	159	0.28	5.68	INTERNAL ORGANS	10,924	0.37	185
MOUTH	37	0.49	UNK BODY PART	104	0.18	11.56	FOREHEAD	7,827	0.26	145
EARS	36	0.48	FOREHEAD	96	0.17	4.17	UNK BODY PART	5,641	0.19	235
SKULL	29	0.38	OTHER BODY PART	48	0.08	8.00	NOSE	3,346	0.11	159
UNK BODY PART	24	0.32	NOSE	47	0.08	5.22	EARS	2,878	0.10	80
NOSE	21	0.28	EARS	44	0.08	3.38	MOUTH	2,618	0.09	71
CHEEK	13	0.17	BUTTOCKS	43	0.08	10.75	BUTTOCKS	2,574	0.09	322
JAW	9	0.12	JAW	28	0.05	5.60	OTHER BODY PART	2,400	0.08	267
OTHER BODY PART	9	0.12	MOUTH	23	0.04	2.09	JAW	1,580	0.05	176
BUTTOCKS	8	0.11	CHEEK	12	0.02	3.00	CHEEK	578	0.02	44
HEAD	2	0.03	HEAD	4	0.01	4.00	HEAD	328	0.01	164
TOTAL	7,558	100.00	TOTAL	56,647	100.00	12.62	TOTAL	2974,457	100.00	394

EXHIBIT 6A

ALL USERS
AVERAGE INJURY RATES
BY AGE GROUP
* COLLECTION DIVISION *

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

	OSHA INCIDENCE RATE			INCIDENCE RATE - LWC		SEVERITY	RA
AGE GROUP	MAN-HOURS EXPOSURE	NO. INJ	RATE	NO. INJ	RATE	WKDYS LOST	RA
< 20 YEARS	915,277	342	74.73	169	37	1,576	3
20-24 YEARS	4,439,634	1,476	66.49	817	37	7,943	3
25-29 YEARS	4,770,354	1,454	60.96	840	35	8,562	3
30-34 YEARS	3,682,983	897	48.71	571	31	7,059	3
35-39 YEARS	3,507,630	748	42.65	471	27	6,569	3
40-44 YEARS	3,333,530	581	34.86	375	22	5,344	3
45-49 YEARS	3,262,240	490	30.04	318	19	4,760	2
50-54 YEARS	2,960,061	415	28.04	253	17	4,238	2
55-59 YEARS	1,959,352	254	25.93	183	19	2,916	2
60-64 YEARS	827,002	88	21.28	61	15	630	1
> 64 YEARS	188,064	21	22.33	16	17	114	1
UNKNOWN	66,165	19	57.43	14	42	282	8
TOTAL	29,912,300	6,765	45.37	4088	27	49,993	3

EXHIBIT 6B

ALL USERS
AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
GROUPED BY AGE
* COLLECTION DIVISION *

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

AGE GROUP	NO LOST WKDY CASES	ACTUAL DAYS LOST	AVG WKDYS LOST
< 20 YEARS	169	1,562	9.25
20-24 YEARS	817	7,943	9.73
25-29 YEARS	840	8,562	10.20
30-34 YEARS	571	7,059	12.37
35-39 YEARS	471	6,569	13.95
40-44 YEARS	375	5,344	14.26
45-49 YEARS	318	4,760	14.97
50-54 YEARS	253	4,238	16.76
55-59 YEARS	183	2,916	15.94
60-64 YEARS	61	630	10.33
> 64 YEARS	16	114	7.13
UNKNOWN	14	282	20.15
TOTAL	4,088	49,979	12.23

EXHIBIT 6C

ALL USERS
DIRECT COSTS
GROUPED BY AGE
* COLLECTION DIVISION *

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.
DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.

AVG DIRECT COST PER OSHA RECORDABLE INJ			DIRECT COST PER MAN YEAR	
AGE GROUP	NO. OSHA RECORD INJ	AVG COST	MAN-HRS EXPOSURE	COSTS PER M-Y
< 20 YEARS	342	196	915,277	147
20-24 YEARS	1,476	269	4,439,634	180
25-29 YEARS	1,454	312	4,770,354	191
30-34 YEARS	897	450	3,682,983	220
35-39 YEARS	748	495	3,507,630	212
40-44 YEARS	581	[illegible]	3,333,530	157
45-49 YEARS	490	535	3,262,240	161
50-54 YEARS	415	672	2,960,061	189
55-59 YEARS	254	574	1,959,352	149
60-64 YEARS	88	403	827,002	86
>64 YEARS	21	284	188,064	64
UNKNOWN	19	565	66,165	325
TOTAL	6,785	397	29,912,300	181

EXHIBIT 7A

ALL USERS
AVERAGE INJURY RATES
BY EXPERIENCE GROUP
* COLLECTION DIVISION *

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

	OSHA INCIDENCE RATE			INCIDENCE RATE - LWC		SEVERITY RATE	
EXPERIENCE GROUP	MAN-HOURS EXPOSURE	NO. INJ	RATE	NO. INJ	RATE	WKDYS LOST	RATE
< 1 MONTH	417,700	292	139.81	137	66	1,266	606
1-2 MONTHS	389,501	229	117.59	111	57	1,556	799
2-3 MONTHS	363,282	186	102.40	88	48	881	485
< 3 MONTHS	1,170,483	707	120.80	0	0	3,703	633
3-6 MONTHS	1,073,723	304	56.63	167	31	1,361	254
6-12 MONTHS	2,074,410	553	53.32	285	27	2,650	255
1-2 YEARS	2,848,501	780	54.77	455	32	4,797	337
2-5 YEARS	5,259,217	1,482	56.36	958	36	9,976	379
5-10 YEARS	6,837,967	1,514	44.28	987	29	14,468	423
> 10 YEARS	9,801,966	1,332	27.18	852	17	12,325	251
UNKNOWN	774,748	113	29.17	48	12	713	184
TOTAL	29,840,980	6,785	45.47	4,088	27	49,993	335

EXHIBIT 7B

ALL USERS
AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
GROUPED BY EXPERIENCE
* COLLECTION DIVISION *

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

EXPERIENCE GROUP	NO LOST WKDY CASES	OSHA DAYS LOST	AVG WKDYS LOST
< 1 MONTH	137	1,266	9.25
1-2 MONTHS	111	1,556	14.02
2-3 MONTHS	88	881	10.02
< 3 MONTHS	336	3,703	11.03
3-6 MONTHS	167	1,361	8.15
6-12 MONTHS	285	2,650	9.30
1-2 YEARS	455	4,783	10.52
2-5 YEARS	958	9,976	10.42
5-10 YEARS	987	14,468	14.66
> 10 YEARS	852	12,325	14.47
UNKNOWN	48	713	14.86
TOTAL	4,088	49,979	12.23

EXHIBIT 7C

ALL USERS
DIRECT COSTS
GROUPED BY EXPERIENCE
* COLLECTION DIVISION *

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.

AVG DIRECT COST PER OSHA RECORDABLE INJ			DIRECT COST PER MAN YEAR	
EXPERIENCE GROUP	NO. OSHA RECORD INJ	AVG COST	MAN-HRS EXPOSURE	COSTS PER M-Y
< 1 MONTH	292	243	417,700	340
1-2 MONTHS	229	295	389,501	348
2-3 MONTHS	186	560	363,282	574
< 3 MONTHS	707	343	1,170,483	415
3-6 MONTHS	304	219	1,073,723	125
6-12 MONTHS	553	242	2,074,410	130
1-2 YEARS	780	410	2,848,501	225
2-5 YEARS	1,482	329	5,259,217	186
5-10 YEARS	1,514	496	6,837,967	220
> 10 YEARS	1,332	487	9,801,966	133
UNKNOWN	113	358	774,748	105
TOTAL	6,785	397	29,840,980	181

EXHIBIT 8A

ALL USERS
AVERAGE INJURY RATES
BY HEIGHT GROUP
* COLLECTION DIVISION *

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

	OSHA INCIDENCE RATE			INCIDENCE RATE - LWC		SEVERITY RATE	
HEIGHT GROUP	MAN-HOURS EXPOSURE	NO. INJ	RATE	NO. INJ	RATE	WKDYS LOST	RATE
< 5'3	775,606	100	25.79	69	17.79	1,340	346.00
5' 3-5' 4	869,774	190	43.69	115	26.44	1,705	392.00
5' 5-5' 6	3,378,733	713	42.21	414	24.51	5,155	305.00
5' 7-5' 8	6,101,018	1,431	46.91	875	28.68	10,403	341.00
5' 9-5'10	6,665,237	1,437	43.12	893	26.80	11,227	337.00
5'11-6'	6,515,228	1,567	48.10	915	28.09	10,508	323.00
6' 1-6' 2	3,284,008	827	50.37	508	30.94	6,195	377.00
6' 3-6' 4	906,686	251	55.37	149	32.87	1,702	375.00
> 6'4	227,356	57	50.14	30	26.39	196	172.00
UNKNOWN	1,192,748	212	35.55	120	20.12	1,562	262.00
TOTAL	29,916,414	6,785	45.36	4,088	27.33	49,993	334.00

EXHIBIT 8B

ALL USERS
AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
GROUPED BY HEIGHT
* COLLECTION DIVISION *

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

HEIGHT GROUP	NO LOST WKDY CASES	OSHA DAYS LOST	AVG WKDYS LOST
< 5'3	69	1,340	19.43
5' 3-5' 4	115	1,705	14.83
5' 5-5' 6	414	5,155	12.46
5' 7-5' 8	875	10,389	11.88
5' 9-5'10	893	11,227	12.58
5'11-6'	915	10,508	11.49
6' 1-6' 2	508	6,195	12.20
6' 3-6' 4	149	1,702	11.43
> 6'4	30	196	6.54
UNKNOWN	120	1,562	13.02
TOTAL	4,088	49,979	12.23

EXHIBIT 8C

ALL USERS
DIRECT COSTS
GROUPED BY HEIGHT GROUP
* COLLECTION DIVISION *

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.

AVG DIRECT COST PER OSHA RECORDABLE INJ			DIRECT COST PER MAN YEAR	
HEIGHT GROUP	NO. OSHA RECORD INJ	AVG COST	MAN-HRS EXPOSURE	COSTS PER M-Y
< 5'3	100	592	775,606	153
5' 3-5' 4	190	467	869,774	204
5' 5-5' 6	713	539	3,378,733	228
5' 7-5' 8	1,431	365	6,101,018	172
5' 9-5'10	1,437	398	6,665,237	172
5'11-6'	1,567	392	6,515,228	189
6' 1-6' 2	827	340	3,284,003	172
6' 3-6' 4	251	383	906,686	212
> 6'4	57	176	227,356	89
UNKNOWN	212	295	1,192,748	105
TOTAL	6,785	397	29,916,414	160

EXHIBIT 9A

ALL USERS
AVERAGE INJURY RATES
BY WEIGHT GROUP
* COLLECTION DIVISION *

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

	OSHA INCIDENCE RATE			INCIDENCE RATE - LWC		SEVERITY RATE	
WEIGHT GROUP	MAN-HOURS EXPOSURE	NO. INJ	RATE	NO. INJ	RATE	WKDYS LOST	RATE
< 130 LBS	377,986	84	44.45	50	26	564	298
130-139 LBS	1,081,416	283	52.34	167	31	1,633	302
140-149 LBS	2,339,807	534	45.64	308	26	3,915	335
150-159 LBS	3,495,856	829	47.43	462	26	4,634	265
160-169 LBS	4,527,019	1, 53	46.52	607	27	8,107	358
170-179 LBS	4,181,272	997	47.69	627	30	7,146	342
180-189 LBS	3,864,063	910	47.10	541	28	7, 57	365
190-199 LBS	2,697,086	568	42.12	365	27	5,334	396
200-209 LBS	2,215,959	448	40.43	280	25	3,678	332
210-219 LBS	1,439,150	295	41.00	182	25	2,226	309
220-229 LBS	1,017,267	240	47.19	158	31	1,695	333
230-239 LBS	544,712	120	44.06	81	30	772	283
240-249 LBS	433,058	98	45.26	63	29	815	376
> 249 LBS	630,684	145	45.98	91	29	1,300	412
UNKNOWN	1,080,137	181	33.51	106	20	1,117	207
TOTAL	29,925,454	6,785	45.35	4,088	27	49,993	334

EXHIBIT 9B

ALL USERS
AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
GROUPED BY WEIGHT
* COLLECTION DIVISION *

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

WEIGHT GROUP	NO LOST WKDY CASES	OSHA DAYS LOST	AVG WKDYS LOST
< 130 LBS	50	564	11.28
130-139 LBS	167	1,633	9.78
140-149 LBS	308	3,915	12.71
150-159 LBS	462	4,634	10.03
160-169 LBS	607	8,107	13.36
170-179 LBS	627	7,132	11.37
180-189 LBS	541	7,057	13.04
190-199 LBS	365	5,334	14.61
200-209 LBS	280	3,678	13.14
210-219 LBS	182	2,226	12.23
220-229 LBS	158	1,695	10.73
230-239 LBS	81	772	9.53
240-249 LBS	63	815	12.94
> 249 LBS	91	1,300	14.29
UNKNOWN	106	1,117	10.54
TOTAL	4,088	49,979	12.23

EXHIBIT 9C

ALL USERS
DIRECT COSTS
GROUPED BY WEIGHT GROUP
* COLLECTION DIVISION *

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.

AVG DIRECT COST PER OSHA RECORDABLE INJ			DIRECT COST PER MAN YEAR	
WEIGHT GROUP	NO OSHA RECORD INJ	AVG COST	MAN-HRS EXPOSURE	COSTS PER M-Y
< 130 LBS	84	364	377,986	162
130-139 LBS	283	291	1,081,416	154
140-149 LBS	534	454	2,339,807	208
150-159 LBS	829	264	3,495,856	126
160-169 LBS	1,053	469	4,527,019	219
170-179 LBS	997	393	4,181,272	188
180-189 LBS	910	395	3,864,063	187
190-199 LBS	568	539	2,697,086	227
200-209 LBS	448	352	2,215,959	143
210-219 LBS	295	460	1,439,150	189
220-229 LBS	240	354	1,017,267	167
230-239 LBS	120	287	544,712	127
240-249 LBS	98	393	433,058	178
> 249 LBS	145	446	630,684	206
UNKNOWN	181	274	1,080,137	92
TOTAL	6,785	397	29,925,454	180

EXHIBIT 10A

ADMISTRATION DIVISION
AVERAGE INJURY RATES BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE.
OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.

SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

	OSHA INCIDENCE RATE				INCIDENCE RATE - LWC				SEVERITY RATE		
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATIO
340	11,965	3	50	6.39	326	1	41	12.67	340	819	20.30
283	8,272	2	48	6.16	340	2	33	10.29	178	233	5.77
326	4,859	1	41	5.24	283	1	24	7.44	316	140	3.46
140	18,312	2	22	2.78	235	1	16	4.84	326	123	3.06
316	58,742	6	20	2.60	178	4	15	4.55	179	89	2.21
235	12,732	1	16	2.00	140	1	11	3.36	181	80	1.99
178	54,155	4	15	1.88	316	3	10	3.14	170	65	1.61
183	43,526	3	14	1.76	170	6	6	1.97	283	48	1.20
217	277,093	14	10	1.29	181	1	6	1.90	AVG	40	1.00
329	20,122	1	10	1.27	183	1	5	1.41	235	31	0.78
179	103,428	5	10	1.23	179	2	4	1.19	140	22	0.54
AVG	1,477,503	58	8	1.00	AVG	24	3	1.00	183	18	0.46
170	187,311	7	7	0.95	217	1	1	0.22	217	9	0.21
181	32,403	1	6	0.79	363	0	0	0.00	363	0	0.00
146	119,936	3	5	0.64	355	0	0	0.00	355	0	0.00
172	167,434	4	5	0.61	350	0	0	0.00	350	0	0.00
186	47,242	1	4	0.54	348	0	0	0.00	348	0	0.00
111	53,437	0	0	0.00	347	0	0	0.00	347	0	0.00
292	39,634	0	0	0.00	346	0	0	0.00	346	0	0.00
323	19,731	0	0	0.00	345	0	0	0.00	345	0	0.00
133	18,167	0	0	0.00	344	0	0	0.00	344	0	0.00
355	14,634	0	0	0.00	343	0	0	0.00	343	0	0.00
211	14,127	0	0	0.00	341	0	0	0.00	341	0	0.00
215	13,068	0	0	0.00	339	0	0	0.00	339	0	0.00
161	11,805	0	0	0.00	338	0	0	0.00	338	0	0.00
242	8,291	0	0	0.00	337	0	0	0.00	337	0	0.00

	OSHA INCIDENCE RATE				INCIDENCE RATE - LWC				SEVERITY RATE		
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATIO
136	7,920	0	0	0.00	336	0	0	0.00	336	0	0.00
363	7,729	0	0	0.00	333	0	0	0.00	333	0	0.00
318	7,485	0	0	0.00	331	0	0	0.00	331	0	0.00
336	7,312	0	0	0.00	329	0	0	0.00	329	0	0.00
345	7,207	0	0	0.00	323	0	0	0.00	323	0	0.00
344	5,888	0	0	0.00	318	0	0	0.00	318	0	0.00
157	5,385	0	0	0.00	299	0	0	0.00	299	0	0.00
296	5,367	0	0	0.00	296	0	0	0.00	296	0	0.00
152	4,993	0	0	0.00	292	0	0	0.00	292	0	0.00
331	4,597	0	0	0.00	272	0	0	0.00	272	0	0.00
201	4,582	0	0	0.00	242	0	0	0.00	242	0	0.00
299	3,910	0	0	0.00	237	0	0	0.00	237	0	0.00
149	3,833	0	0	0.00	226	0	0	0.00	226	0	0.00
347	3,777	0	0	0.00	215	0	0	0.00	215	0	0.00
333	3,766	0	0	0.00	211	0	0	0.00	211	0	0.00
341	3,376	0	0	0.00	207	0	0	0.00	207	0	0.00
272	3,246	0	0	0.00	201	0	0	0.00	201	0	0.00
237	2,946	0	0	0.00	186	0	0	0.00	186	0	0.00
207	2,811	0	0	0.00	182	0	0	0.00	182	0	0.00
348	2,204	0	0	0.00	172	0	0	0.00	172	0	0.00
125	2,197	0	0	0.00	161	0	0	0.00	161	0	0.00
343	2,144	0	0	0.00	157	0	0	0.00	157	0	0.00
115	2,112	0	0	0.00	152	0	0	0.00	152	0	0.00
182	2,003	0	0	0.00	149	0	0	0.00	149	0	0.00
339	1,975	0	0	0.00	146	0	0	0.00	146	0	0.00
338	1,975	0	0	0.00	136	0	0	0.00	136	0	0.00
337	1,975	0	0	0.00	133	0	0	0.00	133	0	0.00
350	1,786	0	0	0.00	125	0	0	0.00	125	0	0.00
346	1,450	0	0	0.00	115	0	0	0.00	115	0	0.00
226	1,129	0	0	0.00	111	0	0	0.00	111	0	0.00

EXHIBIT 10B

ADMISTRATION DIVISION
AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO. LOST WKDY CASES	OSHA DAYS LOST	AVG OSHA DAYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	340	2	49	24.50	1.97
2	179	2	46	23.00	1.85
3	178	4	63	15.75	1.27
4	316	3	41	13.67	1.10
5	181	1	13	13.00	1.05
	AVG	24	298	12.42	1.00
6	217	1	12	12.00	0.97
7	170	6	61	10.17	0.82
8	183	1	4	4.00	0.32
9	326	1	3	3.00	0.24
10	283	1	2	2.00	0.16
11	235	1	2	2.00	0.16
LOWEST	140	1	2	2.00	0.16

EXHIBIT 10C

ADMINISTRATION DIVISION
DIRECT COSTS BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED. DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

AVG DIRECT COST/OSHA RECORDABLE INJ

IRIS USER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)
326	1	913	2.95
178	4	864	2.80
340	3	733	2.37
181	1	679	2.20
170	7	453	1.47
283	2	387	1.25
316	6	369	1.19
179	5	368	1.19
AVG	58	309	1.00
140	2	124	0.40
183	3	122	0.40
217	14	105	0.34
235	1	89	0.29
146	3	81	0.26
172	4	45	0.15
329	1	36	0.12
186	1	30	0.10

DIRECT COST PER MAN YEAR

IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
326	4,859	376	15.40
340	11,965	368	15.06
283	8,272	187	7.68
178	54,155	128	5.23
316	58,742	75	3.09
181	32,403	42	1.72
179	103,428	36	1.46
170	187,311	34	1.39
140	18,312	29	1.20
AVG	1,477,503	24	1.00
183	43,526	17	0.69
235	12,732	14	0.57
217	277,093	11	0.45
146	119,936	4	0.17
329	20,122	4	0.15
172	167,434	2	0.09
186	47,242	1	0.05

EXHIBIT 10D

ADMINISTRATION DIVISION
DIRECT COSTS FOR LOST DAY CASES
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.

IRIS USER NO.	NO. LOST DAY CASES	TOTAL COST	AVG COST/ LOST DAY CASE
340	2	2,154	1,077
326	1	913	913
217	1	895	895
178	4	3,458	865
179	2	1,670	835
316	3	2,124	708
283	1	700	700
181	1	679	679
AVG	24	16,196	675
170	6	3,169	528
183	1	227	227
140	1	118	118
235	1	89	89

EXHIBIT 11A

RESIDENTIAL & COMMERCIAL COLLECTION DIVISION
AVERAGE INJURY RATES BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE.
OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.

SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

OSHA INCIDENCE RATE					INCIDENCE RATE - LWC				SEVERITY RATE		
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATIO
197	1,407	7	995	23.61	197	7	995	31.26	197	29,850	78.24
244	11,423	9	158	3.74	346	1	113	3.54	318	932	2.44
346	1,777	1	113	2.67	244	6	105	3.30	201	904	2.37
207	157,740	75	95	2.26	221	136	76	2.40	221	874	2.29
217	58,915	24	81	1.93	325	42	62	1.94	210	742	1.94
221	356,605	137	77	1.82	212	39	58	1.82	212	597	1.56
325	135,857	50	74	1.75	210	16	48	1.50	125	513	1.35
324	12,117	4	66	1.57	355	2	46	1.45	325	495	1.30
178	9,255	3	65	1.54	318	27	45	1.43	324	479	1.25
351	3,163	1	63	1.50	211	33	45	1.41	AVG	382	1.00
210	67,142	21	63	1.48	207	32	41	1.27	244	350	0.92
211	147,022	44	60	1.42	260	1	40	1.25	179	347	0.91
212	134,659	40	59	1.41	AVG	1,061	32	1.00	296	304	0.80
318	118,690	33	56	1.32	170	295	31	0.99	211	284	0.75
329	3,630	1	55	1.31	125	274	30	0.95	207	280	0.73
201	15,929	4	50	1.19	237	32	30	0.94	237	273	0.72
237	213,571	50	47	1.11	296	2	28	0.87	170	253	0.66
355	8,671	2	46	1.09	201	2	25	0.79	323	248	0.65
AVG	6,667,339	1405	42	1.00	217	7	24	0.75	346	225	0.59
170	1,879,896	394	42	0.99	347	12	22	0.69	148	148	0.39
260	5,045	1	40	0.94	178	1	22	0.68	347	138	0.36
347	110,025	21	38	0.91	330	5	18	0.55	217	136	0.36
125	1,806,719	328	36	0.86	179	45	17	0.53	178	86	0.23
272	5,768	1	35	0.82	324	1	17	0.52	182	80	0.21
349	5,840	1	34	0.81	182	21	13	0.40	260	79	0.21
362	6,031	1	33	0.79	148	18	12	0.37	355	69	0.18

OSHA INCIDENCE RATE					INCIDENCE RATE - LWC				SEVERITY RATE		
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATIO
330	56,947	8	28	0.67	292	1	8	0.27	292	68	0.18
296	14,496	2	28	0.65	323	3	7	0.22	330	35	0.09
179	535,990	68	25	0.60	362	0	0	0.00	362	0	0.00
148	301,914	36	24	0.57	359	0	0	0.00	359	0	0.00
182	328,849	28	17	0.40	351	0	0	0.00	351	0	0.00
292	23,650	2	17	0.40	350	0	0	0.00	350	0	0.00
323	84,031	7	17	0.40	349	0	0	0.00	349	0	0.00
235	14,410	1	14	0.33	329	0	0	0.00	329	0	0.00
326	9,567	0	0	0.00	326	0	0	0.00	326	0	0.00
191	8,248	0	0	0.00	272	0	0	0.00	272	0	0.00
113	4,247	0	0	0.00	235	0	0	0.00	235	0	0.00
136	3,053	0	0	0.00	226	0	0	0.00	226	0	0.00
226	2,661	0	0	0.00	191	0	0	0.00	191	0	0.00
350	1,786	0	0	0.00	136	0	0	0.00	136	0	0.00
359	597	0	0	0.00	113	0	0	0.00	113	0	0.00

EXHIBIT 11B

RESIDENTIAL & COMMERCIAL COLLECTION DIVISION
AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO. LOST WKDY CASES	OSHA DAYS LOST	AVG OSHA DAYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	201	2	72	36.00	3.00
2	323	3	104	34.67	2.89
3	197	7	210	30.00	2.50
4	324	1	29	29.00	2.42
5	318	27	553	20.48	1.71
6	179	46	933	20.28	1.69
7	125	274	4,636	16.92	1.41
8	210	16	249	15.56	1.30
9	148	18	224	12.44	1.04
	AVG	1,061	12,722	11.99	1.00
10	221	136	1,558	11.46	0.96
11	296	2	22	11.00	0.92
12	212	39	402	10.31	0.86
13	237	32	292	9.12	0.76
14	170	295	2,376	8.05	0.67
15	325	42	336	8.00	0.67
16	292	1	8	8.00	0.67
17	207	32	221	6.91	0.58
18	217	6	40	6.67	0.56
19	347	12	76	6.33	0.53
20	211	33	209	6.33	0.53
21	182	21	131	6.24	0.52
22	178	1	4	4.00	0.33
23	244	6	20	3.33	0.28
24	346	1	2	2.00	0.17
25	330	5	10	2.00	0.17
26	260	1	2	2.00	0.17
LOWEST	355	2	3	1.50	0.13

EXHIBIT 11C

RESIDENTIAL & COMMERCIAL COLLECTION DIVISION
DIRECT COSTS BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED. DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

AVG DIRECT COST/OSHA RECORDABLE INJ				DIRECT COST PER MAN YEAR			
IRIS USER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)	IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
197	7	9,237	18.15	217	58,915	2,079	9.67
217	24	2,551	5.01	210	67,142	495	2.30
210	21	791	1.55	212	134,659	439	2.04
212	40	739	1.45	221	356,605	415	1.93
318	33	727	1.43	318	118,690	405	1.88
179	68	552	1.08	325	135,857	393	1.83
221	137	536	1.05	244	11,423	227	1.05
325	50	532	1.05	AVG	6,667,339	215	1.00
AVG	1,405	508	1.00	237	213,571	205	0.95
323	7	466	0.92	170	1,879,896	183	0.85
125	328	441	0.87	201	15,929	178	0.83
170	394	435	0.86	125	1,806,719	160	0.75
237	50	434	0.85	179	535,990	141	0.65
296	2	379	0.75	211	147,022	137	0.64
201	4	354	0.70	296	14,496	105	0.49
148	36	260	0.51	207	157,740	95	0.44
211	44	226	0.44	346	1,777	81	0.38
292	2	214	0.42	323	84,031	79	0.37
182	28	179	0.35	324	12,117	69	0.32
244	9	143	0.28	148	301,914	62	0.29
260	1	134	0.26	260	5,045	53	0.25
347	21	128	0.25	347	110,025	49	0.23
207	75	100	0.20	178	9,255	43	0.20
324	4	91	0.18	292	23,650	36	0.17
346	1	72	0.14	182	328,849	31	0.14
349	1	70	0.14	355	8,671	25	0.12
178	3	67	0.13	349	5,840	24	0.11
330	8	64	0.13	330	56,947	18	0.08
355	2	55	0.11	351	3,163	13	0.06

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AVG DIRECT COST/OSHA RECORDABLE INJ !      DIRECT COST PER MAN YEAR
------------------------------------!------------------------------------
IRIS  NO. OSHA  AVG    AVG RATIO    ! IRIS   MAN-HRS   COSTS   AVG RATIO
USER   RECORD   COST (AVG COST/AVG) ! USER  EXPOSURE  PER M-Y (COSTS/AVG)
 NO.    INJ                         !  NO.
                                    !
 362     1       20       0.04      !  329     3,630       11       0.05
 351     1       20       0.04      !  272     5,768        7       0.03
 329     1       20       0.04      !  362     6,031        7       0.03
 272     1       20       0.04      !  235    14,410        3       0.01
 235     1       20       0.04      !  235    14,410        0       0.01
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EXHIBIT 11D

RESIDENTIAL & COMMERCIAL COLLECTION DIVISION
DIRECT COSTS FOR LOST DAY CASES
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.

IRIS USER NO.	NO. LOST DAY CASES	TOTAL COST	AVG COST/ LOST DAY CASE
197	7	64,664	9,238
323	3	3,161	1,054
210	16	16,458	1,029
318	27	23,788	881
179	46	36,578	795
212	39	29,544	758
201	2	1,379	690
237	32	20,865	652
325	42	26,211	624
AVG	1,061	643,175	606
170	295	168,388	571
217	6	3,356	559
221	136	73,415	540
125	274	141,022	515
148	18	8,541	475
292	1	408	408
296	2	759	380
324	1	312	312
211	33	9,480	287
182	21	4,892	233
244	6	1,199	200
347	12	2,149	179
207	32	5,710	178
178	1	150	150
260	1	134	134
330	5	430	86
346	1	72	72
355	2	110	55

EXHIBIT 12A

RESIDENTIAL COLLECTION DIVISION
AVERAGE INJURY RATES BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE.
OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.

SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

	OSHA INCIDENCE RATE				INCIDENCE RATE - LWC				SEVERITY RATE		
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATIO
03	131,560	98	149	3.06	103	67	102	3.71	358	1,305	3.97
49	81,411	54	133	2.72	212	1	92	3.36	341	1,193	3.63
51	6,520	4	123	2.52	341	24	84	3.05	260	1,068	3.25
60	208,564	111	106	2.18	149	32	79	2.87	103	1,001	3.04
91	251,311	133	106	2.17	191	96	76	2.78	197	930	2.83
54	29,188	15	103	2.11	260	77	74	2.69	149	897	2.73
46	35,368	17	96	1.97	344	20	63	2.29	359	837	2.54
41	57,298	27	94	1.93	351	2	61	2.24	111	811	2.47
12	2,171	1	92	1.89	359	6	60	2.18	350	726	2.21
99	144,831	65	90	1.84	265	139	56	2.04	296	721	2.19
59	20,068	9	90	1.84	348	21	55	2.00	140	711	2.16
43	30,438	13	85	1.75	111	191	54	1.97	344	691	2.10
11	707,959	299	84	1.73	244	16	54	1.95	348	615	1.87
36	336,361	130	77	1.59	197	13	51	1.86	316	599	1.82
52	103,505	40	77	1.59	346	9	51	1.85	172	575	1.75
07	345,770	129	75	1.53	353	2	48	1.73	191	529	1.61
65	497,718	183	74	1.51	343	7	46	1.68	265	528	1.61
53	8,407	3	71	1.46	236	77	46	1.67	207	499	1.52
44	59,669	20	67	1.38	207	77	45	1.62	349	475	1.44
50	60,882	20	66	1.35	350	13	43	1.56	236	469	1.42
72	1,824,463	589	65	1.33	140	108	42	1.52	152	452	1.37
35	158,177	51	64	1.32	183	94	42	1.52	244	442	1.34
83	450,928	145	64	1.32	152	21	41	1.48	353	428	1.30
49	50,527	16	63	1.30	296	10	40	1.45	340	427	1.30
48	76,389	24	63	1.29	181	161	38	1.38	212	369	1.12
4	63,690	20	63	1.29	171	182	36	1.33	215	344	1.05

	OSHA INCIDENCE RATE				INCIDENCE RATE - LWC				SEVERITY RATE		
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATIO
217	2,313,811	708	61	1.26	316	223	35	1.27	171	332	1.01
197	50,964	15	59	1.21	324	5	35	1.27	328	331	1.01
333	54,072	15	55	1.14	339	55	35	1.26	AVG	329	1.00
316	1,275,772	346	54	1.11	337	49	34	1.22	355	327	0.99
171	998,519	270	54	1.11	172	300	33	1.20	181	323	0.98
140	516,928	138	53	1.10	275	17	32	1.15	337	310	0.94
181	851,771	219	51	1.06	261	2	31	1.13	275	309	0.94
328	15,717	4	51	1.04	330	11	30	1.10	362	291	0.89
275	107,590	27	50	1.03	299	21	29	1.06	115	283	0.86
330	72,831	18	49	1.01	235	22	28	1.01	133	283	0.86
AVG	2,417,024	5217	49	1.00	AVG	2,938	27	1.00	333	281	0.85
170	24,943	6	48	0.99	328	2	25	0.93	235	264	0.80
204	33,314	8	48	0.99	170	3	24	0.88	339	258	0.79
161	251,162	59	47	0.96	338	31	24	0.87	299	239	0.73
296	50,189	11	44	0.90	349	6	24	0.87	351	215	0.65
226	37,405	8	43	0.88	326	2	23	0.85	183	213	0.65
324	28,754	6	42	0.86	115	22	23	0.83	161	209	0.64
339	318,147	63	40	0.81	161	26	21	0.75	330	198	0.60
283	105,342	20	38	0.78	354	3	21	0.75	146	197	0.60
146	512,338	90	35	0.72	109	224	20	0.73	346	192	0.58
326	17,126	3	35	0.72	157	18	20	0.73	261	187	0.57
337	292,478	51	35	0.72	133	8	19	0.68	109	176	0.53
358	22,981	4	35	0.71	358	2	17	0.63	338	173	0.52
157	179,791	31	34	0.71	283	9	17	0.62	101	158	0.48
340	392,291	67	34	0.70	355	3	16	0.60	354	158	0.48
237	70,819	12	34	0.70	272	9	16	0.58	204	156	0.47
115	192,343	32	33	0.68	340	30	15	0.56	186	155	0.47
261	12,855	2	31	0.64	146	39	15	0.55	136	151	0.46
101	914,812	139	30	0.62	186	48	15	0.55	324	146	0.44
109	2,222,396	318	29	0.59	362	14	15	0.54	343	138	0.4
186	634,644	83	26	0.54	237	5	14	0.51	170	120	0.37
133	85,633	11	26	0.53	217	140	12	0.44	157	100	0.30
363	101,970	13	25	0.52	204	2	12	0.44	363	100	0.30
272	112,271	14	25	0.51	295	9	12	0.42	217	98	0.30
338	258,540	32	25	0.51	333	3	11	0.40	178	95	0.2
295	154,999	17	22	0.45	226	2	11	0.39	292	94	0.2
355	36,697	4	22	0.45	363	5	10	0.36	272	84	0.2
362	188,870	19	20	0.41	101	44	10	0.35	283	84	0.2
201	90,745	9	20	0.41	329	1	10	0.35	295	81	0.2
329	20,977	2	19	0.39	182	10	7	0.27	182	75	0.2
182	269,095	17	13	0.26	136	5	7	0.26	226	64	0.2
178	299,777	18	12	0.25	178	10	7	0.24	237	48	0.1
292	814,085	41	10	0.21	201	3	7	0.24	242	43	0.1
331	63,786	3	9	0.19	285	1	5	0.18	326	35	0.1
113	22,857	1	9	0.18	292	20	5	0.18	201	31	0.0
136	140,007	6	9	0.18	215	3	5	0.17	329	19	0.0
285	39,991	1	5	0.10	242	4	3	0.11	285	10	0.0
215	126,632	3	5	0.10	331	0	0	0.00	331	0	0.0
242	264,568	4	3	0.06	179	0	0	0.00	179	0	0.0
148	8,788	0	0	0.00	148	0	0	0.00	148	0	0.0
179	1,433	0	0	0.00	113	0	0	0.00	113	0	0.0

EXHIBIT 12B PAGE 1

RESIDENTIAL COLLECTION DIVISION
AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO. LOST WKDY CASES	OSHA DAYS LOST	AVG OSHA DAYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	358	2	150	75.00	6.25
2	215	3	218	72.67	6.06
3	352	1	40	40.00	3.34
4	340	30	838	27.93	2.33
5	333	3	76	25.33	2.11
6	136	5	106	21.20	1.77
7	355	3	60	20.00	1.67
8	349	6	120	20.00	1.67
9	362	14	275	19.64	1.64
10	292	20	382	19.10	1.59
11	197	13	237	18.23	1.52
12	296	10	181	18.10	1.51
13	172	300	5,246	17.49	1.46
14	316	223	3,821	17.13	1.43
15	140	108	1,838	17.02	1.42
16	350	13	221	17.00	1.42
17	101	44	721	16.39	1.37
18	133	8	121	15.12	1.26
19	111	191	2,872	15.04	1.25
20	260	77	1,114	14.47	1.21
21	341	24	342	14.25	1.19
22	242	4	57	14.25	1.19
23	178	10	142	14.20	1.18
24	359	6	84	14.00	1.17
25	328	2	26	13.00	1.08
26	204	2	26	13.00	1.08
27	146	39	505	12.95	1.08
28	115	22	272	12.36	1.03
	AVG	2,938	35,235	11.99	1.00
29	149	32	365	11.41	0.95
30	207	77	863	11.21	0.93
31	348	21	235	11.19	0.93
32	152	21	234	11.14	0.93
33	344	20	220	11.00	0.92
34	186	48	492	10.25	0.85
35	236	77	788	10.23	0.85

RANK	IRIS USER NO.	NO. LOST WKDY CASES	OSHA DAYS LOST	AVG OSHA DAYS LOST	AVG RATIO (DAYS / AVG)
36	363	5	51	10.20	0.85
37	161	26	263	10.12	0.84
38	182	10	101	10.10	0.84
39	275	17	166	9.76	0.81
40	103	68	659	9.69	0.81
41	235	22	209	9.50	0.79
42	265	139	1,315	9.46	0.79
43	337	49	454	9.27	0.77
44	171	182	1,657	9.10	0.76
45	353	2	18	9.00	0.75
46	109	224	1,956	8.73	0.73
47	181	161	1,377	8.55	0.71
48	244	16	132	8.25	0.69
49	299	21	173	8.24	0.69
50	217	140	1,134	8.10	0.68
51	354	3	23	7.67	0.64
52	339	55	411	7.47	0.62
53	338	31	223	7.19	0.60
54	295	9	63	7.00	0.58
55	191	96	665	6.93	0.58
56	330	11	72	6.55	0.55
57	261	2	12	6.00	0.50
58	226	2	12	6.00	0.50
59	272	9	47	5.22	0.44
60	183	93	480	5.16	0.43
61	170	3	15	5.00	0.42
62	157	18	90	5.00	0.42
63	283	9	44	4.89	0.41
64	201	3	14	4.67	0.39
65	324	5	21	4.20	0.35
66	212	1	4	4.00	0.33
67	346	9	34	3.78	0.32
68	351	2	7	3.50	0.29
69	237	5	17	3.40	0.28
70	343	7	21	3.00	0.25
71	329	1	2	2.00	0.17
72	285	1	2	2.00	0.17
LOWEST	326	2	3	1.50	0.13

EXHIBIT 12C

RESIDENTIAL COLLECTION DIVISION
DIRECT COSTS BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED. DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

AVG DIRECT COST/OSHA RECORDABLE INJ				DIRECT COST PER MAN YEAR			
IRIS USER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)	IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
242	4	3,508	9.82	103	131,560	858	4.91
215	3	1,908	5.34	341	57,298	682	3.90
358	4	1,000	2.80	111	707,959	496	2.84
355	4	884	2.47	149	81,411	453	2.59
362	19	843	2.36	140	516,928	410	2.34
296	11	820	2.30	296	50,189	360	2.06
337	51	803	2.25	358	22,981	348	1.99
140	138	765	2.14	197	50,964	325	1.86
341	27	723	2.02	316	1,275,772	317	1.81
136	6	680	1.90	244	59,669	300	1.72
133	11	614	1.72	344	63,690	295	1.69
111	299	586	1.64	350	60,882	295	1.69
316	346	584	1.63	236	336,361	294	1.68
338	32	572	1.60	337	292,478	280	1.60
103	98	570	1.60	260	208,564	280	1.60
261	2	559	1.57	348	76,389	272	1.55
197	15	552	1.55	152	103,505	263	1.51
339	63	544	1.52	265	497,718	247	1.41
344	20	470	1.32	172	1,824,463	244	1.40
340	67	457	1.28	212	2,171	228	1.31
350	20	448	1.26	339	318,147	216	1.23
244	20	447	1.25	207	345,770	212	1.21
348	24	432	1.21	355	36,697	193	1.10
109	318	407	1.14	359	20,068	192	1.10
236	130	379	1.06	235	158,177	190	1.09
172	589	377	1.06	AVG	21,417,024	175	1.00
101	139	357	1.00	261	12,855	174	1.00
AVG	5,217	357	1.00	349	50,527	170	0.97
292	41	357	1.00	362	188,870	170	0.97

AVG DIRECT COST/OSHA RECORDABLE INJ				DIRECT COST PER MAN YEAR			
IRIS USER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)	IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
149	54	341	0.96	181	851,771	168	0.96
115	32	340	0.95	133	85,633	158	0.90
152	40	340	0.95	340	392,291	156	0.89
265	183	335	0.94	191	251,311	156	0.89
181	219	325	0.91	171	998,519	147	0.84
235	51	294	0.82	338	258,540	142	0.81
178	18	290	0.81	354	29,188	136	0.78
146	90	289	0.81	204	33,314	132	0.75
207	129	283	0.79	109	2,222,396	120	0.68
204	8	274	0.77	115	192,343	117	0.67
171	270	272	0.76	353	8,407	117	0.67
349	16	269	0.75	183	450,928	116	0.66
260	111	262	0.74	351	6,520	112	0.64
182	17	248	0.70	101	914,812	109	0.63
212	1	248	0.69	242	264,568	106	0.61
324	6	240	0.67	146	512,338	102	0.58
186	83	236	0.66	324	28,754	100	0.57
359	9	214	0.60	330	72,831	98	0.56
330	18	198	0.56	217	2,313,811	94	0.54
157	31	193	0.54	299	144,831	93	0.53
161	59	189	0.53	275	107,590	91	0.52
275	27	180	0.51	215	126,632	90	0.52
183	145	179	0.50	328	15,717	90	0.52
328	4	177	0.50	161	251,162	90	0.51
295	17	172	0.48	333	54,072	89	0.51
363	13	168	0.47	343	30,438	84	0.48
353	3	163	0.46	346	35,368	76	0.43
333	15	160	0.45	170	24,943	73	0.42
170	6	151	0.42	157	179,791	67	0.38
217	708	151	0.42	186	634,644	62	0.35
191	133	146	0.41	136	140,007	59	0.34
354	15	132	0.37	283	105,342	50	0.28
283	20	131	0.37	363	101,970	43	0.25
272	14	123	0.34	237	70,819	40	0.23
237	12	111	0.31	226	37,405	39	0.23
299	65	103	0.29	295	154,999	38	0.22
343	13	98	0.27	292	814,085	36	0.21
226	8	92	0.26	178	299,777	35	0.20
351	4	91	0.25	182	269,095	32	0.18
346	17	78	0.22	272	112,271	31	0.18
201	9	76	0.21	326	17,126	19	0.11
329	2	69	0.19	201	90,745	15	0.09
113	1	62	0.17	329	20,977	13	0.08
285	1	61	0.17	113	22,857	5	0.03
326	3	53	0.15	285	39,991	3	0.02
331	3	30	0.08	331	63,786	3	0.02
179	0	0	0.00	352	0	0	0.00

EXHIBIT 12D

RESIDENTIAL COLLECTION DIVISION
DIRECT COSTS FOR LOST DAY CASES
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.

IRIS USER NO.	NO. LOST DAY CASES	TOTAL COST	AVG COST/ LOST DAY CASE
242	4	14,032	3,508
352	1	2,195	2,195
358	2	3,877	1,939
215	3	5,725	1,908
362	14	15,917	1,137
355	3	3,335	1,112
101	44	46,140	1,049
340	30	29,607	987
204	2	1,958	979
140	108	103,850	962
296	10	8,976	898
316	223	199,518	895
111	191	169,268	886
133	8	6,704	838
337	49	40,913	835
136	5	4,052	810
103	68	54,996	809
341	24	19,345	806
292	20	13,909	695
172	300	207,787	693
333	3	2,025	675
350	13	8,673	667
349	6	3,824	637
197	13	8,231	633
235	22	13,907	632
339	55	34,121	620
236	77	46,932	610
AVG	2,938	1,766,006	601
152	21	12,521	596
146	39	23,201	595
338	31	18,299	590
217	140	79,994	571
261	2	1,119	560
149	32	17,850	558
109	224	124,171	554
244	16	8,823	551

IRIS USER NO.	NO. LOST DAY CASES	TOTAL COST	AVG COST/ LOST DAY CASE
178	10	4,947	495
348	21	10,213	486
115	22	10,349	470
344	20	9,403	470
207	77	34,715	451
354	3	1,347	449
181	161	69,433	431
265	139	59,037	425
182	10	4,088	409
161	26	10,250	394
171	182	70,653	388
186	48	18,475	385
363	5	1,912	382
260	77	27,811	361
330	11	3,442	313
359	6	1,822	304
157	18	5,384	299
226	2	590	295
328	2	579	290
324	5	1,409	282
295	9	2,473	275
170	3	801	267
275	17	4,538	267
183	93	24,049	259
212	1	248	248
299	21	5,007	238
353	2	476	238
283	9	2,115	235
191	96	18,859	196
272	9	1,625	181
237	5	886	177
201	3	513	171
351	2	329	165
343	7	1,013	145
346	9	1,111	123
329	1	93	93
326	2	155	78
285	1	61	61

EXHIBIT 13A

COMMERCIAL COLLECTION DIVISION
AVERAGE INJURY RATES BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE.
OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.

SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

	OSHA INCIDENCE RATE				INCIDENCE RATE - LWC				SEVERITY RATE		
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATIO
60	47,622	22	92	3.32	351	1	67	4.46	330	1,554	4.74
07	53,192	21	79	2.83	341	3	61	4.06	260	1,369	4.17
29	11,189	4	72	2.57	260	12	50	3.35	296	1,300	3.97
51	2,978	1	67	2.41	207	13	49	3.25	350	689	2.10
58	6,048	2	66	2.37	344	2	46	3.06	207	662	2.02
35	30,407	10	66	2.36	235	7	46	3.06	146	653	1.99
41	9,809	3	61	2.19	329	2	36	2.37	344	483	1.47
46	7,282	2	55	1.97	350	2	34	2.23	351	470	1.43
91	16,224	4	49	1.77	358	1	33	2.20	236	454	1.39
52	4,159	1	48	1.73	296	9	29	1.93	235	421	1.28
44	8,687	2	46	1.65	346	1	27	1.82	133	374	1.14
36	22,451	5	45	1.60	197	5	27	1.77	AVG	328	1.00
96	61,806	13	42	1.51	330	1	23	1.54	341	265	0.81
33	19,203	4	42	1.49	236	2	18	1.18	226	245	0.75
99	5,081	1	39	1.41	186	3	17	1.12	113	200	0.61
04	32,836	6	37	1.31	244	2	17	1.11	204	195	0.59
50	11,907	2	34	1.21	AVG	94	15	1.00	346	165	0.50
44	23,892	4	33	1.20	133	3	13	0.84	197	139	0.42
33	18,243	3	33	1.18	204	2	12	0.81	244	126	0.38
VG	1,248,705	174	28	1.00	146	11	12	0.80	329	125	0.38
97	37,479	5	27	0.96	226	1	12	0.77	358	99	0.30
13	23,987	3	25	0.90	283	1	11	0.73	186	45	0.14
55	74,904	9	24	0.86	183	1	10	0.69	283	44	0.13
16	183,213	22	24	0.86	113	1	8	0.55	183	31	0.10
50	8,620	1	23	0.83	355	3	8	0.53	292	21	0.06
36	35,604	4	22	0.81	336	3	7	0.47	355	16	0.05

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      OSHA INCIDENCE RATE                   INCIDENCE RATE - LWC          SEVERITY RATE
IRIS  MAN-HOURS  NO.  RATE   AVG    IRIS  NO.  RATE  AVG        IRIS RATE   AVG
USER  EXPOSURE   INJ         RATIO  USER  INJ        RATIO      USER          RATIO
NO.                                 NO.                         NO.

133    47,633     5    21    0.75   292    1     3   0.23       336     14    0.04
115    42,752     4    19    0.67   363    0     0   0.00       363      0    0.00
363    15,395     1    13    0.47   362    0     0   0.00       362      0    0.00
336    84,087     5    12    0.43   359    0     0   0.00       359      0    0.00
226    17,171     1    12    0.42   353    0     0   0.00       353      0    0.00
292    57,749     2     7    0.25   349    0     0   0.00       349      0    0.00
178    55,512     1     4    0.13   328    0     0   0.00       328      0    0.00
215    47,135     0     0    0.00   326    0     0   0.00       326      0    0.00
242    30,494     0     0    0.00   324    0     0   0.00       324      0    0.00
272    22,407     0     0    0.00   299    0     0   0.00       299      0    0.00
295    17,556     0     0    0.00   295    0     0   0.00       295      0    0.00
136    13,658     0     0    0.00   272    0     0   0.00       272      0    0.00
359    10,744     0     0    0.00   242    0     0   0.00       242      0    0.00
326     9,771     0     0    0.00   215    0     0   0.00       215      0    0.00
362     4,472     0     0    0.00   191    0     0   0.00       191      0    0.00
324     4,434     0     0    0.00   178    0     0   0.00       178      0    0.00
349     4,155     0     0    0.00   170    0     0   0.00       170      0    0.00
328     3,660     0     0    0.00   152    0     0   0.00       152      0    0.0
170     1,470     0     0    0.00   136    0     0   0.00       136      0    0.0
109     1,156     0     0    0.00   115    0     0   0.00       115      0    0.0
353       471     0     0    0.00   109    0     0   0.00       109      0    0.0
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EXHIBIT 13B

COMMERCIAL COLLECTION DIVISION
AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO. LOST WKDY CASES	OSHA DAYS LOST	AVG OSHA DAYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	330	1	67	67.00	3.08
2	146	11	598	54.36	2.50
3	296	9	402	44.67	2.05
4	133	3	89	29.67	1.36
5	260	12	326	27.17	1.25
6	352	1	26	26.00	1.19
7	236	2	51	25.50	1.17
8	113	1	24	24.00	1.10
	AVG	94	2,048	21.79	1.00
9	226	1	21	21.00	0.96
10	350	2	41	20.50	0.94
11	204	2	32	16.00	0.73
12	207	13	176	13.54	0.62
13	344	2	21	10.50	0.48
14	235	7	64	9.14	0.42
15	244	2	15	7.50	0.34
16	351	1	7	7.00	0.32
17	346	1	6	6.00	0.28
18	292	1	6	6.00	0.28
19	197	5	26	5.20	0.24
20	341	3	13	4.33	0.20
21	283	1	4	4.00	0.18
22	329	2	7	3.50	0.16
23	358	1	3	3.00	0.14
24	183	1	3	3.00	0.14
25	186	3	8	2.67	0.12
26	355	3	6	2.00	0.09
LOWEST	336	3	6	2.00	0.09

EXHIBIT 13C

COMMERCIAL COLLECTION DIVISION
DIRECT COSTS BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED. DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

AVG DIRECT COST/OSHA RECORDABLE INJ				DIRECT COST PER MAN YEAR			
IRIS USER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)	IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
330	1	2,280	3.98	296	61,806	728	4.55
296	13	1,731	3.02	236	22,451	701	4.38
236	5	1,572	2.74	330	8,620	529	3.31
146	22	1,241	2.17	260	47,622	467	2.92
350	2	1,024	1.79	351	2,978	349	2.18
133	5	946	1.65	350	11,907	344	2.15
226	1	598	1.04	146	183,213	298	1.86
AVG	174	573	1.00	341	9,809	277	1.73
351	1	520	0.91	344	8,687	210	1.31
260	22	505	0.88	133	47,633	199	1.24
344	2	456	0.80	235	30,407	194	1.21
341	3	452	0.79	207	53,192	182	1.14
113	3	442	0.77	AVG	1,248,705	160	1.00
204	6	394	0.69	358	6,048	150	0.94
235	10	295	0.52	204	32,836	144	0.90
244	4	271	0.47	113	23,987	111	0.69
197	5	237	0.41	329	11,189	100	0.63
207	21	230	0.40	244	23,892	91	0.57
358	2	227	0.40	346	7,282	84	0.53
292	2	161	0.28	226	17,171	70	0.44
346	2	153	0.27	152	4,159	69	0.43
152	1	143	0.25	197	37,479	63	0.40
329	4	134	0.23	283	18,243	32	0.20
115	4	127	0.22	115	42,752	28	0.18
283	3	93	0.16	299	5,081	24	0.15
186	4	80	0.14	183	19,203	21	0.13
299	1	60	0.10	186	35,604	18	0.11
363	1	53	0.09	292	57,749	11	0.07
183	4	50	0.09	355	74,904	11	0.07

AVG DIRECT COST/OSHA RECORDABLE INJ

IRIS USER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)
355	9	44	0.08
336	5	20	0.03
178	1	20	0.03
191	4	17	0.03
362	0	0	0.00

DIRECT COST PER MAN YEAR

IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
191	16,224	8	0.05
363	15,395	7	0.04
336	84,087	2	0.01
178	55,512	1	0.00
352	0	0	0.00

EXHIBIT 13D

COMMERCIAL COLLECTION DIVISION
DIRECT COSTS FOR LOST DAY CASES
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.

IRIS USER NO.	NO. LOST DAY CASES	TOTAL COST	AVG COST/ LOST DAY CASE
236	2	7,714	3,857
296	9	22,410	2,490
146	11	26,880	2,444
330	1	2,280	2,280
133	3	4,694	1,565
113	1	1,235	1,235
204	2	2,123	1,062
350	2	2,048	1,024
AVG	94	96,087	1,022
352	1	984	984
260	12	10,709	892
226	1	598	598
351	1	520	520
244	2	1,033	517
344	2	912	456
341	3	1,357	452
235	7	2,872	410
207	13	4,560	351
292	1	290	290
346	1	286	286
197	5	1,185	237
358	1	221	221
329	2	406	203
283	1	177	177
183	1	140	140
186	3	288	96
355	3	105	35
336	3	60	20

EXHIBIT 14A

LANDFILL DIVISION
AVERAGE INJURY RATES BY 'IRIS' USERS RANKED FROM HIGHEST TO LOWEST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE.
OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.

SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

	OSHA INCIDENCE RATE				INCIDENCE RATE - LWC				SEVERITY RATE		
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATIO
211	25,804	9	70	3.54	340	1	53	5.98	330	1,995	17.07
340	3,747	1	53	2.71	211	4	31	3.47	340	1,601	13.70
295	40,050	9	45	2.28	345	2	25	2.84	345	949	8.11
133	18,396	4	43	2.21	272	4	25	2.75	125	365	3.12
345	15,814	3	38	1.93	260	1	23	2.56	272	313	2.68
272	32,586	6	37	1.87	133	2	22	2.44	260	274	2.35
265	43,777	8	37	1.86	330	1	22	2.43	111	234	2.00
318	12,597	2	32	1.61	295	4	20	2.24	211	233	1.99
323	21,956	3	27	1.39	283	1	19	2.15	265	128	1.09
146	135,755	18	27	1.35	265	4	18	2.05	AVG	117	1.00
125	137,523	17	25	1.26	125	11	16	1.79	146	94	0.81
260	8,747	1	23	1.16	111	12	16	1.79	295	85	0.73
330	9,221	1	22	1.10	146	7	10	1.16	172	66	0.56
236	46,396	5	22	1.09	172	7	10	1.07	133	65	0.56
111	150,197	16	21	1.08	323	1	9	1.02	217	58	0.49
181	66,886	7	21	1.06	AVG	77	9	1.00	236	30	0.26
325	39,238	4	20	1.04	217	11	6	0.68	181	30	0.26
AVG	1,726,114	170	20	1.00	236	1	4	0.48	283	19	0.16
283	10,442	1	19	0.97	186	2	4	0.46	186	12	0.11
217	360,207	32	18	0.90	181	1	3	0.34	323	9	0.08
172	146,310	12	16	0.83	361	0	0	0.00	361	0	0.00
286	29,630	2	13	0.69	346	0	0	0.00	346	0	0.00
292	48,508	3	12	0.63	326	0	0	0.00	326	0	0.00
186	96,502	4	8	0.42	325	0	0	0.00	325	0	0.00
361	27,716	1	7	0.37	318	0	0	0.00	318	0	0.00
235	38,347	1	5	0.26	299	0	0	0.00	299	0	0.00

OSHA INCIDENCE RATE					INCIDENCE RATE - LWC				SEVERITY RATE		
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATIO
101	54,869	0	0	0.00	292	0	0	0.00	292	0	0.00
242	21,506	0	0	0.00	286	0	0	0.00	286	0	0.00
178	21,341	0	0	0.00	261	0	0	0.00	261	0	0.00
136	19,685	0	0	0.00	242	0	0	0.00	242	0	0.00
207	11,462	0	0	0.00	235	0	0	0.00	235	0	0.00
226	6,249	0	0	0.00	226	0	0	0.00	226	0	0.00
261	5,326	0	0	0.00	207	0	0	0.00	207	0	0.00
201	5,005	0	0	0.00	201	0	0	0.00	201	0	0.00
326	4,403	0	0	0.00	178	0	0	0.00	178	0	0.00
299	4,133	0	0	0.00	149	0	0	0.00	149	0	0.00
346	2,794	0	0	0.00	136	0	0	0.00	136	0	0.00
149	1,770	0	0	0.00	115	0	0	0.00	115	0	0.00
115	1,221	0	0	0.00	101	0	0	0.00	101	0	0.00

EXHIBIT 14B

LANDFILL DIVISION
AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO. LOST WKDY CASES	OSHA DAYS LOST	AVG OSHA DAYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	330	1	92	92.00	7.02
2	345	2	75	37.50	2.86
3	340	1	30	30.00	2.29
4	125	11	251	22.82	1.74
5	111	12	176	14.67	1.12
	AVG	77	1,009	13.10	1.00
6	272	4	51	12.75	0.97
7	260	1	12	12.00	0.92
8	181	1	10	10.00	0.76
9	217	11	104	9.45	0.72
10	146	7	64	9.14	0.70
11	211	4	30	7.50	0.57
12	265	4	28	7.00	0.53
13	236	1	7	7.00	0.53
14	172	7	48	6.86	0.52
15	295	4	17	4.25	0.32
16	186	2	6	3.00	0.23
17	133	2	6	3.00	0.23
18	323	1	1	1.00	0.08
LOWEST	283	1	1	1.00	0.08

EXHIBIT 14C

LANDFILL DISPOSAL DIVISION
DIRECT COSTS BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED. DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

AVG DIRECT COST/OSHA RECORDABLE INJ				DIRECT COST PER MAN YEAR			
IRIS USER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)	IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
330	1	2,055	5.77	340	3,747	793	11.28
111	16	1,567	4.40	330	9,221	446	6.34
340	1	1,486	4.17	111	150,197	334	4.75
345	3	663	1.86	345	15,814	252	3.58
125	17	562	1.58	125	137,523	139	1.98
AVG	170	356	1.00	211	25,804	93	1.33
172	12	233	0.66	272	32,586	85	1.21
272	6	231	0.65	AVG	1,726,114	70	1.00
217	32	224	0.63	295	40,050	68	0.96
146	18	159	0.45	133	18,396	52	0.74
295	9	150	0.42	146	135,755	42	0.60
211	9	129	0.36	217	360,207	40	0.57
133	4	119	0.34	172	146,310	38	0.55
236	5	109	0.31	265	43,777	33	0.47
186	4	109	0.31	318	12,597	30	0.42
181	7	93	0.26	236	46,396	24	0.34
265	8	90	0.26	181	66,886	20	0.28
260	1	82	0.23	260	8,747	19	0.27
283	1	52	0.15	323	21,956	11	0.16
286	2	50	0.14	283	10,442	10	0.14
292	3	44	0.12	186	96,502	9	0.13
323	3	42	0.12	325	39,238	8	0.12
318	2	41	0.12	286	29,630	7	0.10
325	4	40	0.11	292	48,508	5	0.08
235	1	40	0.11	235	38,347	2	0.03
361	1	20	0.06	361	27,716	1	0.02

EXHIBIT 14D

LANDFILL DISPOSAL DIVISION
DIRECT COSTS FOR LOST DAY CASES
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.

IRIS USER NO.	NO. LOST DAY CASES	TOTAL COST	AVG COST/ LOST DAY CASE
111	12	24,814	2,068
330	1	2,055	2,055
340	1	1,486	1,486
345	2	1,960	980
125	11	9,252	841
AVG	77	56,856	738
217	11	6,423	584
181	1	542	542
146	7	2,441	349
172	7	2,398	343
272	4	1,347	337
236	1	332	332
295	4	1,150	288
211	4	953	238
133	2	438	219
186	2	398	199
265	4	647	162
323	1	86	86
260	1	82	82
283	1	52	52

EXHIBIT 15A

INCINERATOR DIVISION
AVERAGE INJURY RATES BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE.
OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.

SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

	OSHA INCIDENCE RATE				INCIDENCE RATE - LWC				SEVERITY RATE		
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATI
345	37,255	12	64	2.93	345	8	43	2.87	115	954	2.9
115	43,208	7	32	1.47	115	7	32	2.17	125	349	1.0
AVG	736,342	81	22	1.00	AVG	55	15	1.00	AVG	329	1.0
125	522,185	50	19	0.87	125	33	13	0.85	345	134	0.4
272	126,034	12	19	0.87	272	7	11	0.74	272	111	0.3
170	3,974	0	0	0.00	178	0	0	0.00	178	0	0.0
178	3,686	0	0	0.00	170	0	0	0.00	170	0	0.0

EXHIBIT 15B

INCINERATOR DIVISION
AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO. LOST WKDY CASES	OSHA DAYS LOST	AVG OSHA DAYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	115	7	206	29.43	1.34
2	125	33	910	27.58	1.25
	AVG	55	1,211	22.02	1.00
3	272	7	70	10.00	0.45
LOWEST	345	8	25	3.12	0.14

EXHIBIT 15C

PAGE 1

INCINERATOR DISPOSAL DIVISION
DIRECT COSTS BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED. DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

AVG DIRECT COST/OSHA RECORDABLE INJ				DIRECT COST PER MAN YEAR			
IRIS USER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)	IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
115	7	1,722	2.55	115	43,208	572	3.83
125	50	754	1.12	AVG	736,342	149	1.00
AVG	81	675	1.00	125	522,185	144	0.97
272	12	244	0.36	345	37,255	109	0.73
345	12	168	0.25	272	126,034	47	0.31

EXHIBIT 15D

INCINERATOR DISPOSAL DIVISION
DIRECT COSTS FOR LOST DAY CASES
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.

IRIS USER NO.	NO. LOST DAY CASES	TOTAL COST	AVG COST/ LOST DAY CASE
115	7	12,057	1,722
125	33	37,014	1,122
AVG	55	53,732	977
272	7	2,769	396
345	8	1,892	237

EXHIBIT 16A PAGE 1

TRANSFER STATION DIVISION
AVERAGE INJURY RATES BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE.
OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.

SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

	OSHA INCIDENCE RATE				INCIDENCE RATE - LWC				SEVERITY RATE		
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATIO
347	5,904	2	68	3.56	347	1	34	3.74	318	725	10.52
318	12,138	3	49	2.60	318	2	33	3.63	347	406	5.90
217	38,259	6	31	1.65	283	1	10	1.06	AVG	69	1.00
283	20,874	3	29	1.51	265	4	9	1.03	265	30	0.44
AVG	220,537	21	19	1.00	AVG	10	9	1.00	283	29	0.42
265	85,489	6	14	0.74	170	1	6	0.66	170	12	0.17
170	33,282	1	6	0.32	217	1	5	0.58	217	10	0.15
152	8,410	0	0	0.00	361	0	0	0.00	361	0	0.00
242	7,524	0	0	0.00	345	0	0	0.00	345	0	0.00
345	5,993	0	0	0.00	286	0	0	0.00	286	0	0.00
286	1,740	0	0	0.00	242	0	0	0.00	242	0	0.00
361	924	0	0	0.00	152	0	0	0.00	152	0	0.00

PAGE 1

EXHIBIT 16B

TRANSFER STATION DIVISION
AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO. LOST WKDY CASES	OSHA DAYS LOST	AVG OSHA DAYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	318	2	44	22.00	2.89
2	347	1	12	12.00	1.58
	AVG	10	76	7.60	1.00
3	265	4	13	3.25	0.43
4	283	1	3	3.00	0.39
5	217	1	2	2.00	0.26
LOWEST	170	1	2	2.00	0.26

EXHIBIT 16C

TRANSFER STATION DISPOSAL DIVISION
DIRECT COSTS BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED. DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

AVG DIRECT COST/OSHA RECORDABLE INJ				DIRECT COST PER MAN YEAR			
IRIS USER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)	IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
318	3	830	4.06	318	12,138	410	10.51
347	2	238	1.17	347	5,904	161	4.13
AVG	21	204	1.00	AVG	220,537	39	1.00
217	6	102	0.50	217	38,259	32	0.82
283	3	86	0.42	283	20,874	25	0.64
170	1	71	0.35	265	85,489	9	0.23
265	6	62	0.31	170	33,282	4	0.11

EXHIBIT 16D

TRANSFER STATION DISPOSAL DIVISION
DIRECT COSTS FOR LOST DAY CASES
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.

IRIS USER NO.	NO. LOST DAY CASES	TOTAL COST	AVG COST/ LOST DAY CASE
318	2	2,466	1,233
347	1	456	456
217	1	392	392
AVG	10	3,811	381
283	1	168	168
170	1	71	71
265	4	258	65

EXHIBIT 17A PAGE 1

STREET CLEANING DIVISION
AVERAGE INJURY RATES BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

EPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

EFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE.
SHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES /
AN-HOURS EXPOSURE) X 200,000.
OUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES
ER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL
REATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.

EVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000.
OUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME
MPLOYEES PER YEAR.

NSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE
OW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

	OSHA INCIDENCE RATE				INCIDENCE RATE - LWC				SEVERITY RATE		
RIS SER O.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATI
41	11,889	5	84	5.22	341	4	67	6.87	341	1,766	13.
99	28,239	8	57	3.52	179	29	24	2.49	179	514	3.
79	238,121	43	36	2.24	235	4	19	1.99	299	496	3.7
43	6,573	1	30	1.89	299	2	14	1.45	201	354	2.
01	37,317	5	27	1.66	125	46	13	1.38	125	180	1.
35	41,063	4	19	1.21	191	10	12	1.20	AVG	133	1.
60	46,302	4	17	1.07	201	2	11	1.09	170	113	0.
01	596,194	50	17	1.04	170	3	11	1.08	235	78	0.
91	170,688	14	16	1.02	323	1	10	1.01	186	63	0.4
25	682,136	55	16	1.00	AVG	135	10	1.00	178	61	0.4
VG	2,755,468	222	16	1.00	178	5	8	0.80	260	56	0.4
78	128,320	7	11	0.68	182	7	6	0.59	182	44	0.
70	56,886	3	11	0.65	101	17	6	0.58	101	40	0.
23	20,300	1	10	0.61	186	3	5	0.46	191	37	0.
86	132,338	6	9	0.56	260	1	4	0.44	323	20	0.1
82	243,652	10	8	0.51	148	1	1	0.07	148	8	0.
48	313,336	6	4	0.24	353	0	0	0.00	353	0	0.
53	2,115	0	0	0.00	343	0	0	0.00	343	0	0.

EXHIBIT 17B PAGE 1

STREET CLEANING DIVISION
AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO. LOST WKDY CASES	OSHA DAYS LOST	AVG OSHA DAYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	299	2	70	35.00	2.58
2	201	2	66	33.00	2.44
3	341	4	105	26.25	1.94
4	179	29	612	21.10	1.56
5	186	3	42	14.00	1.03
	AVG	135	1,828	13.54	1.00
6	125	46	614	13.35	0.99
7	260	1	13	13.00	0.96
8	148	1	13	13.00	0.96
9	170	3	32	10.67	0.79
10	178	5	39	7.80	0.58
11	182	7	54	7.71	0.57
12	101	17	118	6.94	0.51
13	235	4	16	4.00	0.30
14	191	10	32	3.20	0.24
LOWEST	323	1	2	2.00	0.15

EXHIBIT 17C

STREET CLEANING DIVISION
DIRECT COSTS BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED. DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

AVG DIRECT COST/OSHA RECORDABLE INJ				DIRECT COST PER MAN YEAR			
IRIS USER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)	IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
341	5	794	2.72	341	11,889	680	14.38
201	5	579	1.98	201	37,317	155	3.28
125	55	425	1.46	179	238,121	152	3.21
179	43	420	1.44	299	28,239	129	2.73
170	3	384	1.31	125	682,136	69	1.46
AVG	222	292	1.00	343	6,573	58	1.22
299	8	227	0.78	AVG	2,755,468	47	1.00
186	6	222	0.76	170	56,886	41	0.86
260	4	218	0.75	260	46,302	38	0.80
178	7	203	0.70	235	41,063	35	0.74
343	1	190	0.65	178	128,320	22	0.47
235	4	180	0.62	186	132,338	20	0.43
182	10	150	0.52	101	596,194	19	0.41
101	50	113	0.39	191	170,688	13	0.27
148	6	105	0.36	182	243,652	13	0.26
323	1	88	0.30	323	20,300	10	0.21
191	14	78	0.27	148	313,336	4	0.09

EXHIBIT 17D

STREET CLEANING DIVISION
DIRECT COSTS FOR LOST DAY CASES
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.

IRIS USER NO.	NO. LOST DAY CASES	TOTAL COST	AVG COST/ LOST DAY CASE
201	2	2,747	1,374
341	4	3,954	989
299	2	1,577	789
260	1	709	709
179	29	17,078	589
125	46	22,824	496
AVG	135	60,636	449
186	3	1,273	424
148	1	409	409
170	3	1,152	384
178	5	1,375	275
101	17	4,256	250
182	7	1,445	206
235	4	723	181
191	10	1,026	103
323	1	88	88

EXHIBIT 18A

WEED AND LITTER CONTROL DIVISION
AVERAGE INJURY RATES BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE.
OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.

SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

	OSHA INCIDENCE RATE				INCIDENCE RATE - LWC				SEVERITY RATE		
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATI
361	906	1	221	6.49	341	10	86	4.53	326	3,797	12.7
341	23,348	14	120	3.53	170	16	29	1.53	341	1,079	3.6
204	30,483	14	92	2.70	326	1	25	1.31	295	638	2.1
170	110,687	21	38	1.12	295	1	21	1.13	AVG	299	1.0
AVG	423,373	72	34	1.00	AVG	40	19	1.00	111	266	0.8
111	125,375	16	26	0.75	111	10	16	0.84	170	255	0.8
326	8,110	1	25	0.73	204	2	13	0.69	204	92	0.3
295	9,400	1	21	0.63	361	0	0	0.00	361	0	0.0
217	87,056	4	9	0.27	340	0	0	0.00	340	0	0.0
323	24,429	0	0	0.00	330	0	0	0.00	330	0	0.0
330	2,181	0	0	0.00	323	0	0	0.00	323	0	0.0
340	1,399	0	0	0.00	217	0	0	0.00	217	0	0.0

EXHIBIT 18B

WEED AND LITTER CONTROL DIVISION
AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO. LOST WKDY CASES	OSHA DAYS LOST	AVG OSHA DAYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	326	1	154	154.00	9.75
2	295	1	30	30.00	1.90
3	111	10	167	16.70	1.06
	AVG	40	632	15.80	1.00
4	341	10	126	12.60	0.80
5	170	16	141	8.81	0.56
LOWEST	204	2	14	7.00	0.44

EXHIBIT 18C

WEED AND LITTER CONTROL DIVISION
DIRECT COSTS BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED. DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

AVG DIRECT COST/OSHA RECORDABLE INJ				DIRECT COST PER MAN YEAR			
IRIS USER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)	IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
326	1	33,999	44.84	326	8,110	8,385	32.52
295	1	2,968	3.91	295	9,400	632	2.45
AVG	72	758	1.00	341	23,348	509	1.97
341	14	424	0.56	AVG	423,373	258	1.00
111	16	335	0.44	170	110,687	95	0.37
170	21	250	0.33	111	125,375	86	0.33
204	14	68	0.09	204	30,483	63	0.24
361	1	20	0.03	361	906	44	0.17
217	4	17	0.02	217	87,056	2	0.01

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EXHIBIT 18D

WEED AND LITTER CONTROL DIVISION
DIRECT COSTS FOR LOST DAY CASES
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.

IRIS USER NO.	NO. LOST DAY CASES	TOTAL COST	AVG COST/ LOST DAY CASE
326	1	33,999	33,999
295	1	2,968	2,968
AVG	40	52,874	1,322
341	10	5,293	529
111	10	5,230	523
170	16	5,120	320
204	2	264	132

EQUIPMENT MAINTENANCE DIVISION
AVERAGE INJURY RATES BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE.
OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.

SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

	OSHA INCIDENCE RATE				INCIDENCE RATE - LWC				SEVERITY RATE		
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATI
349	3,893	3	154	4.42	349	1	51	3.50	349	1,284	5.7
329	3,086	2	130	3.72	152	1	34	2.34	125	465	2.0
299	9,333	6	129	3.69	204	1	30	2.05	295	459	2.0
204	6,643	3	90	2.59	272	3	26	1.77	179	423	1.8
355	11,020	4	73	2.08	140	7	25	1.68	204	301	1.3
324	2,916	1	69	1.97	170	7	23	1.54	201	267	1.1
146	3,326	1	60	1.72	125	10	22	1.53	AVG	224	1.0
140	56,682	17	60	1.72	295	1	18	1.20	152	172	0.7
201	45,690	13	57	1.63	336	1	16	1.07	272	165	0.7
361	3,634	1	55	1.58	179	13	15	1.02	140	113	0.5
340	37,288	9	48	1.38	AVG	53	15	1.00	340	113	0.5
170	61,996	12	39	1.11	109	2	13	0.91	336	78	0.3
AVG	722,494	126	35	1.00	340	2	11	0.73	170	68	0.3
272	23,072	4	35	0.99	236	1	11	0.72	109	47	0.2
152	5,826	1	34	0.98	186	1	9	0.64	186	19	0.0
125	88,973	14	31	0.90	201	2	9	0.60	236	11	0.0
179	173,824	26	30	0.86	363	0	0	0.00	363	0	0.0
109	29,964	3	20	0.57	361	0	0	0.00	361	0	0.0
186	21,160	2	19	0.54	359	0	0	0.00	359	0	0.0
295	11,318	1	18	0.51	355	0	0	0.00	355	0	0.0
336	12,749	1	16	0.45	346	0	0	0.00	346	0	0.0
133	12,770	1	16	0.45	330	0	0	0.00	330	0	0.0
236	18,864	1	11	0.30	329	0	0	0.00	329	0	0.0
316	36,213	0	0	0.00	324	0	0	0.00	324	0	0.0
136	8,607	0	0	0.00	323	0	0	0.00	323	0	0.0
323	7,001	0	0	0.00	316	0	0	0.00	316	0	0.0

	OSHA INCIDENCE RATE				INCIDENCE RATE - LWC				SEVERITY RATE		
RIS SER O.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATIO
13	6,684	0	0	0.00	299	0	0	0.00	299	0	0.00
46	4,082	0	0	0.00	226	0	0	0.00	226	0	0.00
59	3,513	0	0	0.00	191	0	0	0.00	191	0	0.00
91	3,227	0	0	0.00	178	0	0	0.00	178	0	0.00
30	2,583	0	0	0.00	157	0	0	0.00	157	0	0.00
15	2,128	0	0	0.00	146	0	0	0.00	146	0	0.00
63	1,675	0	0	0.00	136	0	0	0.00	136	0	0.00
78	930	0	0	0.00	133	0	0	0.00	133	0	0.00
26	924	0	0	0.00	115	0	0	0.00	115	0	0.00
57	898	0	0	0.00	113	0	0	0.00	113	0	0.00

EXHIBIT 19B

EQUIPMENT MAINTENANCE DIVISION
AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO. LOST WKDY CASES	OSHA DAYS LOST	AVG OSHA DAYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	201	2	61	30.50	2.00
2	179	13	368	28.31	1.85
3	295	1	26	26.00	1.70
4	349	1	25	25.00	1.64
5	125	10	207	20.70	1.35
	AVG	53	810	15.28	1.00
6	340	2	21	10.50	0.69
7	204	1	10	10.00	0.65
8	272	3	19	6.33	0.41
9	336	1	5	5.00	0.33
10	152	1	5	5.00	0.33
11	140	7	32	4.57	0.30
12	109	2	7	3.50	0.23
13	170	7	21	3.00	0.20
14	186	1	2	2.00	0.13
LOWEST	236	1	1	1.00	0.07

EXHIBIT 19C PAGE 1

EQUIPMENT MAINTENANCE DIVISION
DIRECT COSTS BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED. DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

AVG DIRECT COST/OSHA RECORDABLE INJ				DIRECT COST PER MAN YEAR			
IRIS USER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)	IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
179	26	702	2.13	349	3,893	1,076	9.32
349	3	698	2.12	125	88,973	217	1.88
125	14	689	2.09	179	173,824	210	1.82
295	1	642	1.94	152	5,826	140	1.21
152	1	394	1.19	140	56,682	124	1.08
AVG	126	330	1.00	AVG	722,494	116	1.00
272	4	317	0.96	295	11,318	113	0.98
236	1	217	0.66	272	23,072	110	0.95
140	17	205	0.62	201	45,690	84	0.73
109	3	173	0.53	340	37,288	68	0.59
201	13	147	0.45	329	3,086	50	0.43
340	9	141	0.43	299	9,333	38	0.33
170	12	97	0.29	170	61,996	38	0.33
186	2	44	0.13	109	29,964	37	0.32
324	1	39	0.12	204	6,643	35	0.30
329	2	38	0.12	324	2,916	27	0.23
204	3	38	0.12	236	18,864	24	0.20
355	4	30	0.09	355	11,020	22	0.19
299	6	29	0.09	146	3,326	12	0.10
361	1	20	0.06	361	3,634	11	0.10
336	1	20	0.06	186	21,160	8	0.07
146	1	20	0.06	336	12,749	3	0.03
133	1	20	0.06	133	12,770	3	0.03

EXHIBIT 19D

EQUIPMENT MAINTENANCE DIVISION
DIRECT COSTS FOR LOST DAY CASES
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.

IRIS USER NO.	NO. LOST DAY CASES	TOTAL COST	AVG COST/ LOST DAY CASE
349	1	1,999	1,999
179	13	17,394	1,338
125	10	9,465	947
AVG	53	38,474	726
201	2	1,443	722
295	1	642	642
340	2	972	486
140	7	3,044	435
272	3	1,251	417
152	1	394	394
109	2	488	244
236	1	217	217
170	7	1,029	147
186	1	68	68
204	1	48	48
336	1	20	20

EXHIBIT 20A PAGE 1

MISCELLANEOUS SERVICES DIVISION
AVERAGE INJURY RATES BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

EPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

EFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE.
SHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES /
AN-HOURS EXPOSURE) X 200,000.
OUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES
ER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL
EATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.

VERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000.
UGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME
PLOYEES PER YEAR.

STRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE
W IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

	OSHA INCIDENCE RATE				INCIDENCE RATE - LWC				SEVERITY RATE		
IS ER .	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATIO
9	1,476	2	271	7.67	179	2	271	15.35	179	1,084	5.28
7	2,873	2	139	3.94	235	1	79	4.45	111	415	2.02
5	2,545	1	79	2.22	111	15	33	1.89	AVG	205	1.00
5	38,521	10	52	1.47	AVG	19	18	1.00	146	130	0.63
1	90,050	23	51	1.45	146	1	5	0.29	235	79	0.38
3	215,151	38	35	1.00	355	0	0	0.00	355	0	0.00
3	63,985	0	0	0.00	283	0	0	0.00	283	0	0.00
)	6,475	0	0	0.00	260	0	0	0.00	260	0	0.00
5	3,759	0	0	0.00	236	0	0	0.00	236	0	0.00
5	3,209	0	0	0.00	217	0	0	0.00	217	0	0.00
5	2,033	0	0	0.00	186	0	0	0.00	186	0	0.00
)	226	0	0	0.00	148	0	0	0.00	148	0	0.00

EXHIBIT 20B

MISCELLANEOUS SERVICES DIVISION
AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO. LOST WKDY CASES	OSHA DAYS LOST	AVG OSHA DAYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	146	1	25	25.00	2.15
2	111	15	187	12.47	1.07
	AVG	19	221	11.63	1.00
3	179	2	8	4.00	0.34
LOWEST	235	1	1	1.00	0.09

EXHIBIT 20C

MISCELLANEOUS SERVICES DIVISION
DIRECT COSTS BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED. DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

AVG DIRECT COST/OSHA RECORDABLE INJ

IRIS USER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)
111	23	379	1.44
AVG	38	263	1.00
179	2	171	0.65
146	10	77	0.29
235	1	61	0.23
217	2	55	0.21

DIRECT COST PER MAN YEAR

IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
179	1,476	464	4.97
111	90,050	194	2.08
AVG	215,151	93	1.00
217	2,873	77	0.82
235	2,545	48	0.51
146	38,521	40	0.43

EXHIBIT 20D

MISCELLANEOUS SERVICES DIVISION
DIRECT COSTS FOR LOST DAY CASES
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.

IRIS USER NO.	NO. LOST DAY CASES	TOTAL COST	AVG COST/ LOST DAY CASE
111	15	8,046	536
AVG	19	8,650	455
146	1	201	201
179	2	342	171
235	1	61	61

EXHIBIT 21A

CONTAINER MAINTENANCE DIVISION
AVERAGE INJURY RATES BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE.
OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.

SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

	OSHA INCIDENCE RATE				INCIDENCE RATE - LWC				SEVERITY RATE		
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATIO
359	3,709	2	108	1.31	115	1	101	2.85	115	604	3.02
115	1,988	1	101	1.22	359	1	54	1.53	AVG	200	1.00
AVG	17,002	7	82	1.00	AVG	3	35	1.00	359	162	0.81
204	11,305	4	71	0.86	204	1	18	0.50	204	142	0.71

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EXHIBIT 21B

CONTAINER MAINTENANCE DIVISION
AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE
HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO. LOST WKDY CASES	OSHA DAYS LOST	AVG OSHA DAYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	204	1	8	8.00	1.41
2	115	1	6	6.00	1.06
	AVG	3	17	5.67	1.00
LOWEST	359	1	3	3.00	0.53

EXHIBIT 21C

CONTAINER MANTENANCE DIVISION
DIRECT COSTS BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED. DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

AVG DIRECT COST/OSHA RECORDABLE INJ

IRIS USER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)
115	1	324	3.72
AVG	7	87	1.00
359	2	66	0.76
204	4	38	0.44

DIRECT COST PER MAN YEAR

IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
115	1,988	326	4.55
359	3,709	72	1.00
AVG	17,002	72	1.00
204	11,305	27	0.38

EXHIBIT 21D

CONTAINER MANTENANCE DIVISION
DIRECT COSTS FOR LOST DAY CASES
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.

IRIS USER NO.	NO. LOST DAY CASES	TOTAL COST	AVG COST/ LOST DAY CASE
115	1	324	324
AVG	3	468	156
359	1	96	96
204	1	48	48

ALL USERS
AVERAGE INJURY RATES
GROUPED BY STANDARD JOB CLASSIFICATION CODE

EPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

EFINITIONS: OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / AN-HOURS EXPOSURE) X 200,000. OUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES ER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL REATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.

EVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000. OUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME PLOYEES PER YEAR.

	OSHA INCIDENCE RATE			INCIDENCE RATE-LWC		SEVERITY RATE	
OB TITLE	MAN-HOURS EXPOSURE	NO. INJ	RATE	NO. INJ	RATE	WKDYS LOST	RATE
LLECTOR (NON-DRIVER)	3,329	0	0	0	0	0	0
CKER TR.DRIVER (NON-COLL)	2,958	0	0	0	0	0	0
ERHEAD CRANE PERATOR	845	0	0	0	0	0	0
NUAL SWEEPER PERATOR	1,843.	0	0	0	0	0	0
ERICAL PERSONNEL	2,003	0	0	0	0	0	0
LKY ITEM CRANE R.LABORER	194	0	0	0	0	0	0
PERINTENDENT	108,709	2	4	2	4	4	7
SISTANT UPERINTENDENT	44,726	0	0	0	0	0	0
STRICT MANAGER	46,700	4	17	0	0	0	0
BORER	4,114	0	0	0	0	0	0
N. ENFORCEMENT USTOMER SERVICE FFICER	97,767	4	8	1	2	21	43
SPATCHER	71,820	2	6	0	0	0	0
LESMAN	4,572	0	0	0	0	0	0
TCHMAN/GUARD	114,142	9	16	6	11	117	205
STODIAN	40,838	2	10	2	10	6	29
ORES CLERK	6,127	0	0	0	0	0	0
FETY/TRAINING IRECTOR	14,118	0	0	0	0	0	0
MINISTRATIVE SSISTANT	65,601	0	0	0	0	0	0
ERICAL PERSONNEL	488,678	7	3	3	1	51	21
SPECTOR	81,900	5	12	4	10	63	154
PERVISOR	368,745	21	11	6	3	39	21
SID./COMM. COLL. OREMAN	257,252	14	11	4	3	15	12
SID./COMM. COLL. EFUSE COLLECTOR(NON VER)	4,566,168	1,051	46	792	35	9,093	398

	OSHA INCIDENCE RATE			INCIDENCE RATE-LWC		SEVERITY	RAT
JOB TITLE	MAN-HOURS EXPOSURE	NO. INJ	RATE	NO. INJ	RATE	WKDYS LOST	RAT
RESID/COMM.COLL.PACKER TRUCK DRIVER ONLY(NON-COLL)	1,700,827	235	28	183	22	2,730	3
RESID/COMM. COLL. COLLECTOR/DRIVER	315,458	76	48	59	37	827	5
RESID./COMM. COLL. ROLL-OFF DRIVER	0	1	0	1	0	1	
RESID/COMM.COLL. OPEN BODY TRUCK DRIVER	13,194	12	182	11	167	60	9
RESID/COMM COLL. TRAILER DRIVER	6,025	4	133	1	33	6	1
RESID/COMM.COLL.BULKY ITEM CRANE TRUCK DRIVER	1,778	0	0	0	0	0	
RESID./COMM. COLL. DEAD ANIMAL COLLECTOR/DRIVER	9,171	0	0	0	0	0	
RESID/COMM COLL. HEAVY EQUIP. OPERATOR	3,073	0	0	0	0	0	
RESID/COMM. COLL. INSPECTOR	4,219	1	47	1	47	4	1
RESIS/COMM COLL. BULKY ITEM CRANE TR LABORER	1,569	0	0	0	0	0	
RESIDENTIAL COLLECTION FOREMAN	722,679	63	17	22	6	227	
RESID. COLL. REFUSE COLLECTOR (NON-DRIVER)	11,999,564	3,068	51	1712	29	19,508	3
RESID. COLL. PACKER TRUCK DRIVER ONLY(NON-COLL)	4,031,278	792	39	432	21	6,021	2
RESID. COLL. COLLECTOR/DRIVER	4,350,865	1,053	48	658	30	7,737	3
RESID. COLL. MULTIPLE EQUIPMENT DRIVER	335,810	68	40	39	23	1,037	6
RESID. COLL. OPEN BODY TRUCK DRIVER	90,541	26	57	4	9	17	
RESIDENTIAL COLLECTION TRAILER DRIVER	23,104	5	43	2	17	12	1
RESID.COLL.BULKY ITEM CRANE TRUCK DRIVER	256,174	40	31	15	12	45	
RESID. COLL DEAD ANIMAL COLLECTOR/DRIVER	28,878	5	35	2	14	12	
RESID COLL. LABORER	11,988	0	0	0	0	0	
RESID. COLL.BULKY ITEM CRANE TR. LABORER	21,620	3	28	3	28	8	

JOB TITLE	OSHA INCIDENCE RATE MAN-HOURS EXPOSURE	NO. INJ	RATE	INCIDENCE RATE-LWC NO. INJ	RATE	SEVERITY WKDYS LOST	RATE RATE
ESID. COLL. BULKY ITEM COLLECTOR	182,986	61	67	31	34	262	286
ULKY ITEM MULTIPLE EQUIPMENT OPERATOR	9,472	1	21	1	21	2	42
OMM.COLLECTION FOREMAN	27,853	0	0	0	0	0	0
OMM.COLLECTION REFUSE COLLECTOR(NON-DRIVER)	395,847	67	34	39	20	737	372
OMM. COLL. PACKER TRUCK DRIVER ONLY (NON-COLL.)	437,337	42	19	23	11	783	358
OMM.COLLECTION COLLECTOR/DRIVER	409,853	68	33	36	18	592	289
OMM.COLLECTION ROLL-OFF DRIVER	53,025	4	15	1	4	24	91
OMM.COLL.CONTAINER DELIVERY TRUCK DRIVER	18,215	2	22	0	0	0	0
OMM.COLL.MULTIPLE EQUIPMENT DRIVER	217	1	920	0	0	0	0
ANDFILL FOREMAN	93,141	10	21	5	11	21	45
ANDFILL PACKER TRUCK DRIVER (NON-COLL)	13,958	3	43	2	29	15	215
ANDFILL OPEN BODY TRUCK DRIVER	28,000	3	21	1	7	10	71
ANDFILL HEAVY EQUIPMENT OPERATOR	799,433	84	21	39	10	660	165
ANDFILL OVERHEAD CRANE OPERATOR	21,860	1	9	0	0	0	0
ANDFILL FEE COLLECTOR/SCALEMAN	245,332	5	4	2	2	88	72
ANDFILL SPOTTER	130,238	12	18	5	8	76	117
ANDFILL LABORER	412,987	44	21	21	10	139	67
ANDFILL ATCHMAN/GUARD	33,735	5	30	3	18	8	47
ANDFILL TRUCK DRIVER	1,534	0	0	0	0	0	0
NCINERATOR FOREMEN	107,444	11	20	5	9	44	82
NCINERATOR HEAVY EQUIPMENT OPERATOR	217,260	26	24	17	16	437	402
NCINERATOR OPERATOR	13,953	2	29	2	29	67	960
NCINERATOR OVERHEAD CRANE OPERATOR	19,670	1	10	0	0	0	0
NCINERATOR FEE COLLECTOR/SCALEMAN	7,517	1	27	1	27	1	27
NCINERATOR SPOTTER	6,009	0	0	0	0	0	0
NCINERATOR STOKER	17,611	3	34	3	34	70	795
NCINERATOR MAINTENANCE REPAIRMAN	32,844	2	12	2	12	12	73
NCINERATOR MECHANIC	6,579	0	0	0	0	0	0
NCINERATOR LABORER	336,122	32	19	23	14	562	334
RANSFER STATION OREMAN	8,179	2	49	1	24	43	1,051

JOB TITLE	OSHA INCIDENCE RATE MAN-HOURS EXPOSURE	NO. INJ	RATE	INCIDENCE RATE-LWC NO. INJ	RATE	SEVERITY RAT WKDYS LOST	RAT
TRANSFER STATION TRAILER DRIVER	106,282	12	23	1	2	2	
TRANSFER STATION HEAVY EQUIPMENT OPERATOR	26,623	2	15	1	8	3	[illegible]
TRANSFER STATION SCALEMAN	12,224	1	16	0	0	0	
TRANSFER STATION SPOTTER	6,049	0	0	0	0	0	
TRANSFER STATION LABORER	68,150	17	50	10	29	35	1
RECYCLING OPERATIONS OPERATOR	8,991	1	22	0	0	0	
STREET CLEANING FOREMAN	180,615	4	4	2	2	4	
STREET CLEANING (NON-DRIVER)	29,579	0	0	0	0	0	
STREET CLEANING OPEN BODY TRUCK DRIVER	379,635	28	15	22	12	237	1
MECHANICAL STREET SWEEPER OPERATOR	712,248	55	15	27	8	355	1
MANUAL STREET SWEEPER	627,284	48	15	41	13	607	1
STREET CLEANING LABORER	1,000,604	89	18	45	9	637	1
WEED AND LITTER CONTROL FOREMAN	16,609	0	0	0	0	0	
WEED AND LITTER CONTROL OPEN BODY TRUCK DRIVER	64,847	9	28	5	15	49	1
WEED AND LITTER CONTROL CREW TRUCK DRIVER	29,617	3	20	1	7	7	[illegible]
WEED AND LITTER CONTROL LABORER	227,555	53	47	34	30	582	51
WEED AND LITTER INSPECTOR	112,353	3	5	0	0	0	
EQUIPMENT MAINTENANCE FOREMAN	50,479	3	12	3	12	7	[illegible]
EQUIPMENT MAINTENANCE MECHANIC	416,548	69	33	24	12	418	2
EQUIPMENT MAINTENANCE ELECTRICIAN	8,607	0	0	0	0	0	
EQUIPMENT MAINTENANCE WELDER	34,453	14	81	7	41	104	6
EQUIPMENT MAINTENANCE LABORER	219,978	24	22	11	10	153	1
EQUIPMENT MAINTENANCE SKILLED LABORER	50,925	9	35	6	24	121	4
EQUIPMENT MAINTENANCE PAINTER	1,689	2	237	0	0	0	
EQUIPMENT MAINTENANCE DRIVER	4,228	0	0	0	0	0	

JOB TITLE	OSHA INCIDENCE RATE			INCIDENCE RATE-LWC		SEVERITY RATE	
	MAN-HOURS EXPOSURE	NO. INJ	RATE	NO. INJ	RATE	WKDYS LOST	RATE
ISCELLANEOUS SERVICES FOREMAN	20,779	3	29	0	0	0	0
ISCELLANEOUS SERVICES COLLECTOR (NON-DRIVER)	12,897	3	47	1	16	25	388
ISCELLANEOUS SERVICES COLLECTOR/DRIVER	90,050	21	47	14	31	188	418
ISCELLANEOUS SERVICES OPERATOR/DRIVER	7,628	0	0	0	0	0	0
ISCELLANEOUS SERVICES LABORER	86,933	6	14	1	2	1	2
ONTAINER MAINTENANCE FOREMAN	3,461	1	58	0	0	0	0
ONTAINER MAINTENANCE CONT. DELIVERY TRUCK DRIVER	1,194	0	0	0	0	0	0
ONTAINER MAINTENANCE WELDER	7,128	2	56	2	56	9	253
ONTAINER MAINTENANCE LABORER	8,990	4	89	1	22	8	178
ISCELLANEOUS SERVICES EXTERMINATOR	13,327	2	30	2	30	8	120
RPENTER	8,425	1	24	0	0	0	0
OTAL	39,081,778	7,556	39	4490	23	55,879	286

FIGURE 22B

ALL USERS
AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
GROUPED BY STANDARD JOB CLASSIFICATION

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

JOB TITLE	NO LOST WKDY CASES	ACTUAL DAYS LOST	AVG WKDYS LOST
SUPERINTENDENT	2	4	2.00
SAN. ENFORCEMENT / CUSTOMER SERVICE OFFICER	1	21	21.00
WATCHMAN/GUARD	6	117	19.50
CUSTODIAN	2	6	3.00
CLERICAL PERSONNEL	3	51	17.00
INSPECTOR	4	63	15.75
SUPERVISOR	6	39	6.50
RESID./COMM. COLL. FOREMAN	4	15	3.75
RESID./COMM. COLL. REFUSE COLLECTOR(NON DRIVER)	792	9,093	11.48
RESID/COMM.COLL.PACKER TRUCK DRIVER ONLY(NON-COLL)	183	2,730	14.92
RESID/COMM. COLL. COLLECTOR/DRIVER	59	827	14.02
RESID./COMM. COLL. ROLL-OFF DRIVER	1	1	1.00
RESID/COMM.COLL. OPEN BODY TRUCK DRIVER	11	60	5.45
RESID/COMM COLL. TRAILER DRIVER	1	6	6.00
RESID/COMM. COLL. INSPECTOR	1	4	4.00
RESIDENTIAL COLLECTION FOREMAN	22	227	10.32
RESID. COLL. REFUSE COLLECTOR (NON-DRIVER)	1,712	19,494	11.39
RESID. COLL. PACKER TRUCK DRIVER ONLY(NON-COLL)	432	6,021	13.94
RESID. COLL. COLLECTOR/DRIVER	658	7,737	11.76
RESID. COLL. MULTIPLE EQUIPMENT DRIVER	39	1,037	26.59
RESID. COLL. OPEN BODY TRUCK DRIVER	4	17	4.25
RESIDENTIAL COLLECTION TRAILER DRIVER	2	12	6.00
RESID.COLL.BULKY ITEM CRANE TRUCK DRIVER	15	45	3.00
RESID. COLL DEAD ANIMAL COLLECTOR/DRIVER	2	12	6.00
RESID. COLL.BULKY ITEM CRANE TR. LABORER	3	8	2.67
RESID. COLL. BULKY ITEM COLLECTOR	31	262	8.45
BULKY ITEM MULTIPLE EQUIPMENT OPERATOR	1	2	2.00
COMM.COLLECTION REFUSE COLLECTOR(NON-DRIVER)	39	737	18.90
COMM. COLL. PACKER TRUCK DRIVER ONLY (NON-COLL.)	23	783	34.04
COMM.COLLECTION COLLECTOR/DRIVER	36	592	16.44
COMM.COLLECTION ROLL-OFF DRIVER	1	24	24.00
LANDFILL FOREMAN	5	21	4.20
LANDFILL PACKER TRUCK DRIVER (NON-COLL)	2	15	7.50
LANDFILL OPEN BODY TRUCK DRIVER	1	10	10.00
LANDFILL HEAVY EQUIPMENT OPERATOR	39	660	16.92
LANDFILL FEE COLLECTOR/SCALEMAN	2	88	44.00
LANDFILL SPOTTER	5	76	15.20
LANDFILL LABORER	21	139	6.62
LANDFILL WATCHMAN/GUARD	3	8	2.67
INCINERATOR FOREMEN	5	44	8.80
INCINERATOR HEAVY EQUIPMENT OPERATOR	17	437	25.71
INCINERATOR OPERATOR	2	67	33.50
INCINERATOR FEE COLLECTOR/SCALEMAN	1	1	1.00
INCINERATOR STOKER	3	70	23.33
INCINERATOR MAINTENANCE REPAIRMAN	2	12	6.0

JOB TITLE	NO LOST WKDY CASES	ACTUAL DAYS LOST	AVG WKDYS LOST
INCINERATOR LABORER	23	562	24.43
TRANSFER STATION FOREMAN	1	43	43.00
TRANSFER STATION TRAILER DRIVER	1	2	2.00
TRANSFER STATION HEAVY EQUIPMENT OPERATOR	1	3	3.00
TRANSFER STATION LABORER	10	35	3.50
STREET CLEANING FOREMAN	2	4	2.00
STREET CLEANING OPEN BODY TRUCK DRIVER	22	237	10.77
MECHANICAL STREET SWEEPER OPERATOR	27	355	13.15
MANUAL STREET SWEEPER	41	607	14.80
STREET CLEANING LABORER	45	637	14.16
WEED AND LITTER CONTROL OPEN BODY TRUCK DRIVER	5	49	9.80
WEED AND LITTER CONTROL CREW TRUCK DRIVER	1	7	7.00
WEED AND LITTER CONTROL LABORER	34	582	17.12
EQUIPMENT MAINTENANCE FOREMAN	3	7	2.33
EQUIPMENT MAINTENANCE MECHANIC	24	418	17.42
EQUIPMENT MAINTENANCE WELDER	7	104	14.86
EQUIPMENT MAINTENANCE LABORER	11	153	13.91
EQUIPMENT MAINTENANCE SKILLED LABORER	6	121	20.17
MISCELLANEOUS SERVICES COLLECTOR (NON-DRIVER)	1	25	25.00
MISCELLANEOUS SERVICES COLLECTOR/DRIVER	14	188	13.43
MISCELLANEOUS SERVICES LABORER	1	1	1.00
MISCELLANEOUS SERVICES EXTERMINATOR	2	8	4.00
CONTAINER MAINTENANCE WELDER	2	9	4.50
CONTAINER MAINTENANCE LABORER	1	8	8.00
	1	5	5.00
TOTAL	4,490	55,865	12.44

FIGURE 22C

ALL USERS
DIRECT COSTS
GROUPED BY STANDARD JOB CLASSIFICATION CODE

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED
DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.
DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.

AVG DIRECT COST PER OSHA RECORDABLE INJ			DIRECT COST PER MAN YEAR	
JOB TITLE	NO. OSHA RECORD INJ	AVG COST	MAN-HRS EXPOSURE	COSTS PER M-Y
SUPERINTENDENT	2	490	108,709	18
DISTRICT MANAGER	4	64	46,700	11
SAN. ENFORCEMENT / CUSTOMER SERVICE OFFICER	4	397	97,767	32
DISPATCHER	2	68	71,820	4
WATCHMAN/GUARD	9	585	114,142	92
CUSTODIAN	2	158	40,838	15
CLERICAL PERSONNEL	7	324	488,678	9
INSPECTOR	5	708	81,900	86
SUPERVISOR	21	147	368,745	17
RESID./COMM. COLL. FOREMAN	14	155	257,252	17
RESID./COMM. COLL. REFUSE COLLECTOR(NON DRIVER)	1,051	464	4,566,168	214
RESID/COMM.COLL.PACKER TRUCK DRIVER ONLY(NON-COLL)	235	515	1,700,827	142
RESID/COMM. COLL. COLLECTOR/DRIVER	76	1,313	315,458	632
RESID./COMM. COLL. ROLL-OFF DRIVER	1	75	0	0
RESID/COMM.COLL. OPEN BODY TRUCK DRIVER	12	478	13,194	870
RESID/COMM COLL. TRAILER DRIVER	4	120	6,025	160
RESID/COMM. COLL. INSPECTOR	1	158	4,219	75
RESIDENTIAL COLLECTION FOREMAN	63	358	722,679	62
RESID. COLL. REFUSE COLLECTOR (NON-DRIVER)	3,068	329	11,999,564	168

AVG DIRECT COST PER OSHA RECORDABLE INJ			DIRECT COST PER MAN YEAR	
JOB TITLE	NO. OSHA RECORD INJ	AVG COST	MAN-HRS EXPOSURE	COSTS PER M-Y
RESID. COLL. PACKER TRUCK DRIVER ONLY(NON-COLL)	792	398	4,031,278	156
RESID. COLL. COLLECTOR/DRIVER	1,053	413	4,350,865	200
RESID. COLL. MULTIPLE EQUIPMENT DRIVER	68	735	335,810	298
RESID. COLL. OPEN BODY TRUCK DRIVER	26	65	90,541	37
RESIDENTIAL COLLECTION TRAILER DRIVER	5	210	23,104	91
RESID.COLL.BULKY ITEM CRANE TRUCK DRIVER	40	71	256,174	22
RESID. COLL DEAD ANIMAL COLLECTOR/DRIVER	5	100	28,878	35
RESID. COLL.BULKY ITEM CRANE TR. LABORER	3	205	21,620	57
RESID. COLL. BULKY ITEM COLLECTOR	61	192	182,986	128
BULKY ITEM MULTIPLE EQUIPMENT OPERATOR	1	100	9,472	21
COMM.COLLECTION REFUSE COLLECTOR(NON-DRIVER)	67	516	395,847	175
COMM. COLL. PACKER TRUCK DRIVER ONLY (NON-COLL.)	42	733	437,337	141
COMM.COLLECTION COLLECTOR/DRIVER	68	548	409,853	182
COMM.COLLECTION ROLL-OFF DRIVER	4	331	53,025	50
COMM.COLL.CONTAINER DELIVERY TRUCK DRIVER	2	20	18,215	4
COMM.COLL.MULTIPLE EQUIPMENT DRIVER	1	31	217	285
LANDFILL FOREMAN	10	191	93,141	41
LANDFILL PACKER TRUCK DRIVER (NON-COLL)	3	337	13,958	145
LANDFILL OPEN BODY TRUCK DRIVER	3	124	28,000	27
LANDFILL HEAVY EQUIPMENT OPERATOR	84	381	799,433	80
LANDFILL OVERHEAD CRANE OPERATOR	1	20	21,860	2
LANDFILL FEE COLLECTOR/SCALEMAN	5	3,219	245,332	131

AVG DIRECT COST PER OSHA RECORDABLE INJ			DIRECT COST PER MAN YEAR	
JOB TITLE	NO. OSHA RECORD INJ	AVG COST	MAN-HRS EXPOSURE	COSTS PER M-Y
LANDFILL SPOTTER	12	373	130,238	69
LANDFILL LABORER	44	107	412,987	23
LANDFILL WATCHMAN/GUARD	5	80	33,735	24
INCINERATOR FOREMEN	11	354	107,444	73
INCINERATOR HEAVY EQUIPMENT OPERATOR	26	932	217,260	223
INCINERATOR OPERATOR	2	1,175	13,953	337
INCINERATOR OVERHEAD CRANE OPERATOR	1	31	19,670	3
INCINERATOR FEE COLLECTOR/SCALEMAN	1	187	7,517	50
INCINERATOR STOKER	3	1,805	17,611	615
INCINERATOR MAINTENANCE REPAIRMAN	2	164	32,844	20
INCINERATOR LABORER	32	530	336,122	101
TRANSFER STATION FOREMAN	2	1,202	8,179	588
TRANSFER STATION TRAILER DRIVER	12	69	106,282	16
TRANSFER STATION HEAVY EQUIPMENT OPERATOR	2	113	26,623	17
TRANSFER STATION SCALEMAN	1	34	12,224	6
TRANSFER STATION LABORER	17	132	68,150	66
RECYCLING OPERATIONS OPERATOR	1	45	8,991	10
STREET CLEANING FOREMAN	4	87	180,615	4
STREET CLEANING OPEN BODY TRUCK DRIVER	28	286	379,635	42
MECHANICAL STREET SWEEPER OPERATOR	55	248	712,248	38
MANUAL STREET SWEEPER	48	452	627,284	69
STREET CLEANING LABORER	89	241	1,000,604	43
WEED AND LITTER CONTROL OPEN BODY TRUCK DRIVER	9	300	64,847	83
WEED AND LITTER CONTROL CREW TRUCK DRIVER	3	85	29,617	17
WEED AND LITTER CONTROL LABORER	53	987	227,555	460
WEED AND LITTER INSPECTOR	3	17	112,353	1
EQUIPMENT MAINTENANCE FOREMAN	3	242	50,479	29

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AVG DIRECT COST PER OSHA RECORDABLE INJ !      DIRECT COST PER MAN YEAR
----------------------------------------!-------------------------------------
 JOB                    NO. OSHA     AVG  !      MAN-HRS          COSTS
TITLE                  RECORD INJ    COST !      EXPOSURE         PER M-Y
                                          !
EQUIPMENT MAINTENANCE                     !
 MECHANIC                   69       329  !      416,548            109
EQUIPMENT MAINTENANCE                     !
 WELDER                     14       274  !       34,453            222
EQUIPMENT MAINTENANCE                     !
 LABORER                    24       331  !      219,978             72
EQUIPMENT MAINTENANCE                     !
 SKILLED LABORER             9       618  !       50,925            218
EQUIPMENT MAINTENANCE                     !
 PAINTER                     2        38  !        1,689             90
MISCELLANEOUS                             !
 SERVICES FOREMAN            3        54  !       20,779             16
MISCELLANEOUS                             !
 SERVICES COLLECTOR                       !
 (NON-DRIVER)                3       111  !       12,897             52
MISCELLANEOUS                             !
 SERVICES                                 !
 COLLECTOR/DRIVER           21       401  !       90,050            187
MISCELLANEOUS                             !
 SERVICES LABORER            6        63  !       86,933              9
CONTAINER MAINTENANCE                     !
 FOREMAN                     1        36  !        3,461             21
CONTAINER MAINTENANCE                     !
 WELDER                      2       210  !        7,128            118
CONTAINER MAINTENANCE                     !
 LABORER                     4        38  !        8,990             34
NO JOB TITLE # 0             1       152  !       15,743             19
MISCELLANEOUS                             !
 SERVICES EXTERMINATOR       2       171  !       13,327             51
CARPENTER                    1        20  !        8,425              5
                                          !
TOTAL                    7,556       394  !   39,081,778            153
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EXHIBIT 23A

AVERAGE INJURY RATES BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
WESTERN REGION

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE.
OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

	OSHA INCIDENCE RATE				INCIDENCE RATE - LWC				SEVERITY RATE		
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATIO
352	22,412	14	125	2.37	341	52	91	2.70	341	1,457	3.03
341	114,452	61	107	2.02	221	136	65	1.94	260	903	1.88
260	325,054	139	86	1.62	212	40	58	1.74	221	809	1.68
207	569,485	225	79	1.50	260	92	57	1.68	197	802	1.67
351	15,739	6	76	1.44	348	21	52	1.55	296	786	1.63
343	41,566	14	67	1.28	210	16	48	1.42	318	784	1.63
221	417,046	137	66	1.24	265	147	47	1.39	210	746	1.55
210	66,730	21	63	1.19	325	42	46	1.35	350	672	1.40
265	628,803	197	63	1.19	207	122	43	1.27	111	603	1.25
111	1,181,051	355	60	1.14	211	37	40	1.18	212	593	1.23
212	136,830	41	60	1.13	111	229	39	1.15	352	589	1.22
348	80,655	24	60	1.13	350	15	38	1.14	348	585	1.22
204	118,936	35	59	1.11	351	3	38	1.13	172	487	1.01
325	184,305	54	59	1.11	318	29	38	1.13	AVG	481	1.00
211	186,549	53	57	1.08	343	7	34	1.00	207	443	0.92
350	78,028	22	56	1.07	AVG	1389	34	1.00	265	431	0.90
172	2,173,820	605	56	1.05	197	25	31	0.91	325	365	0.76
AVG	8,248,944	2178	53	1.00	172	307	28	0.84	211	256	0.53
318	152,245	38	50	0.95	296	21	27	0.81	133	205	0.43
296	153,937	26	34	0.64	352	2	18	0.53	351	178	0.37
197	162,538	27	33	0.63	204	8	13	0.40	204	151	0.31
329	72,446	10	28	0.52	133	13	12	0.37	343	101	0.21
133	210,249	21	20	0.38	329	3	8	0.25	292	73	0.15
361	35,849	3	17	0.32	292	22	4	0.12	329	25	0.05
286	32,407	2	12	0.23	361	0	0	0.00	361	0	0.00
292	1,087,732	48	9	0.17	286	0	0	0.00	286	0	0.00

EXHIBIT 23B

AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
WESTERN REGION

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO LOST WKDY CASES	DAYS LOST	AVG WKDYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	352	2	66	33.00	2.31
2	296	21	605	28.81	2.02
3	197	25	652	26.08	1.82
4	318	29	597	20.59	1.44
5	292	22	396	18.00	1.26
6	350	15	262	17.47	1.22
7	172	307	5,294	17.24	1.21
8	133	13	216	16.62	1.16
9	341	52	834	16.04	1.12
10	260	92	1,467	15.95	1.12
11	210	16	249	15.56	1.09
12	111	229	3,560	15.55	1.09
	AVG	1,389	19,852	14.29	1.00
13	221	136	1,687	12.40	0.87
14	204	8	90	11.25	0.79
15	348	21	236	11.24	0.79
16	207	122	1,260	10.33	0.72
17	212	40	406	10.15	0.71
18	265.	147	1,356	9.22	0.65
19	325	42	336	8.00	0.56
20	211	37	239	6.46	0.45
21	351	3	14	4.67	0.33
22	343	7	21	3.00	0.21
LOWEST	329	3	9	3.00	0.21

EXHIBIT 23C PAGE 1

DIRECT COSTS BY 'IRIS' USERS RANKED FROM HIGHEST TO LOWEST
WESTERN REGION

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED
DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.
TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

AVG DIRECT COST PER OSHA RECORDABLE INJ				DIRECT COST PER MAN YEAR			
IRIS USER NO.	NO OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)	IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
197	27	3,694	7.83	197	162,538	1,227	4.92
296	26	1,242	2.63	341	114,452	824	3.30
210	21	791	1.68	210	66,730	498	2.00
341	61	771	1.63	212	136,830	436	1.75
212	41	727	1.54	296	153,937	420	1.68
318	38	700	1.48	221	417,046	387	1.55
111	355	604	1.28	111	1,181,051	363	1.46
221	137	586	1.24	318	152,245	351	1.41
133	21	571	1.21	352	22,412	321	1.29
325	54	540	1.15	325	184,305	317	1.27
350	22	501	1.06	350	78,028	283	1.13
AVG	2,178	472	1.00	348	80,655	258	1.04
348	24	434	0.92	260	325,054	255	1.02
172	605	373	0.79	AVG	8,248,944	249	1.00
292	48	324	0.69	172	2,173,820	208	0.83
265	197	317	0.67	265	628,803	199	0.80
260	139	298	0.63	207	569,485	172	0.69
352	14	257	0.54	211	186,549	121	0.49
207	225	218	0.46	351	15,739	115	0.46
211	53	210	0.44	133	210,249	114	0.46
204	35	165	0.35	204	118,986	97	0.39
351	6	151	0.32	343	41,566	71	0.28
343	14	105	0.22	292	1,087,732	29	0.11
329	10	81	0.17	329	72,446	24	0.10
286	2	50	0.11	286	32,407	6	0.02
361	3	20	0.04	361	35,849	3	0.01

AVERAGE INJURY RATES BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
MID-WESTERN REGION

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE.
OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

OSHA INCIDENCE RATE					INCIDENCE RATE - LWC				SEVERITY RATE		
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATIO
103	133,393	98	147	3.52	103	68	102	3.78	103	988	3.91
149	86,517	54	125	2.99	149	32	74	2.74	149	844	3.34
346	54,688	20	73	1.75	344	22	56	2.09	344	617	2.44
152	126,969	42	66	1.58	346	11	40	1.49	359	447	1.77
349	67,333	20	59	1.42	183	96	37	1.36	349	431	1.71
183	521,436	152	58	1.40	359	7	36	1.33	152	376	1.49
359	38,923	11	57	1.35	171	182	35	1.29	340	339	1.34
344	78,126	22	56	1.35	152	22	35	1.28	171	318	1.26
171	1,043,033	270	52	1.24	181	163	33	1.23	181	285	1.13
181	981,537	227	46	1.11	AVG	954	27	1.00	328	270	1.07
161	267,393	59	44	1.06	345	10	24	0.90	AVG	253	1.00
324	50,476	11	44	1.04	324	6	24	0.88	345	244	0.97
AVG	7,067,567	1475	42	1.00	237	36	22	0.82	324	198	0.78
328	19,268	4	42	0.99	261	2	22	0.82	161	197	0.78
237	324,993	61	38	0.90	349	7	21	0.77	183	187	0.74
345	81,885	15	37	0.88	328	2	21	0.77	109	178	0.71
109	2,276,340	321	28	0.68	109	226	20	0.74	353	160	0.64
353	22,447	3	27	0.64	161	26	19	0.72	237	160	0.63
355	151,157	19	25	0.60	353	2	18	0.66	346	154	0.61
340	433,903	48	22	0.53	355	8	11	0.39	261	133	0.53
261	18,090	2	22	0.53	336	5	10	0.36	355	91	0.36
336	104,208	8	15	0.37	340	19	9	0.32	113	84	0.33
113	57,460	4	14	0.33	113	1	3	0.13	336	25	0.10
331	68,319	3	9	0.21	285	1	3	0.12	285	7	0.03
285	59,659	1	3	0.08	331	0	0	0.00	331	0	0.00

EXHIBIT 24B

AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
MID-WESTERN REGION

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO LOST WKDY CASES	DAYS LOST	AVG WKDYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	340	19	735	38.68	4.13
2	113	1	24	24.00	2.56
3	349	7	145	20.71	2.21
4	328	2	26	13.00	1.39
5	359	7	87	12.43	1.33
6	149	32	365	11.41	1.22
7	344	22	241	10.95	1.17
8	152	22	239	10.86	1.16
9	161	26	263	10.12	1.08
10	345	10	100	10.00	1.07
11	103	68	659	9.69	1.03
	AVG	953	8,924	9.36	1.00
12	171	182	1,657	9.10	0.97
13	353	2	18	9.00	0.96
14	109	226	2, 30	8.98	0.96
15	355	8	69	8.62	0.92
16	181	163	1,400	8.59	0.92
17	324	6	50	8.33	0.89
18	237	36	260	7.22	0.77
19	261	2	12	6.00	0.64
20	183	95	487	5.13	0.55
21	346	11	42	3.82	0.41
22	336	5	13	2.60	0.28
LOWEST	285	1	2	2.00	0.21

EXHIBIT 24C

DIRECT COSTS BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
MID-WESTERN REGION

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED
DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.
TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

AVG DIRECT COST PER OSHA RECORDABLE INJ				!	DIRECT COST PER MAN YEAR			
IRIS USER NO.	NO OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)	!	IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
340	48	584	1.76	!	103	133,393	647	6.06
103	98	571	1.72	!	149	36,517	426	3.05
261	2	559	1.69	!	344	75,126	264	1.89
344	22	469	1.41	!	152	126,969	223	1.60
109	321	421	1.27	!	349	67,333	192	1.38
113	4	347	1.05	!	181	981,537	148	1.06
149	54	342	1.03	!	171	1,043,033	141	1.01
152	42	337	1.02	!	AVG	7,067,567	140	1.00
AVG	1,475	332	1.00	!	340	433,903	129	0.92
349	20	323	0.98	!	261	16,090	124	0.89
181	227	320	0.97	!	109	2,276,340	122	0.87
237	61	311	0.94	!	237	324,993	118	0.85
171	270	272	0.82	!	359	38,923	106	0.76
345	15	267	0.81	!	183	521,436	102	0.73
355	19	220	0.66	!	345	81,885	98	0.70
161	59	189	0.57	!	161	267,393	84	0.60
359	11	187	0.56	!	324	50,476	75	0.54
328	4	177	0.53	!	328	19,268	74	0.53
183	152	175	0.53	!	346	54,688	63	0.45
324	11	168	0.51	!	355	151,157	55	0.39
353	3	163	0.49	!	113	57,460	48	0.35
346	20	86	0.26	!	353	22,447	44	0.31
285	1	61	0.18	!	336	104,208	3	0.02
331	3	30	0.09	!	331	68,319	3	0.02
336	8	20	0.06	!	285	59,659	2	0.01

EXHIBIT 25A PAGE 1

AVERAGE INJURY RATES BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
SOUTHERN REGION

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE.
OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

	OSHA INCIDENCE RATE				INCIDENCE RATE - LWC				SEVERITY RATE		
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATIO
191	457,660	151	66	1.97	191	106	46	2.63	358	1,060	4.80
236	459,230	140	61	1.82	236	80	35	1.98	326	530	2.40
217	3,177,013	789	50	1.48	140	116	32	1.81	140	514	2.33
140	727,969	157	43	1.29	170	331	28	1.58	125	407	1.85
358	28,868	6	42	1.24	125	374	23	1.30	236	347	1.57
235	335,489	65	39	1.15	330	18	21	1.21	115	337	1.52
170	2,371,813	444	37	1.12	115	30	21	1.18	191	305	1.38
AVG	17,008,100	2854	34	1.00	358	3	21	1.18	330	285	1.29
330	169,030	28	33	0.99	235	31	18	1.05	215	234	1.06
283	186,941	29	31	0.92	AVG	1498	18	1.00	146	231	1.05
115	287,610	44	31	0.91	283	13	14	0.79	170	223	1.01
125	3,254,797	464	29	0.85	326	4	13	0.75	AVG	221	1.00
226	67,357	9	27	0.80	295	15	12	0.67	235	158	0.72
146	1,093,028	145	27	0.79	186	57	11	0.63	101	107	0.48
101	1,584,010	191	24	0.72	146	59	11	0.61	186	106	0.48
295	255,767	28	22	0.65	217	160	10	0.57	295	106	0.48
363	136,497	14	21	0.61	226	3	9	0.51	226	98	0.44
186	1,032,915	100	19	0.58	101	62	8	0.44	136	95	0.43
326	60,369	5	17	0.49	363	5	7	0.42	178	85	0.39
178	580,297	33	11	0.34	178	20	7	0.39	217	81	0.37
136	222,554	6	5	0.16	136	5	4	0.26	363	75	0.34
215	185,995	3	3	0.10	215	3	3	0.18	283	58	0.26
242	332,809	3	2	0.05	242	3	2	0.10	242	19	0.09

EXHIBIT 25B PAGE 1

AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
SOUTHERN REGION

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO LOST WKDY CASES	DAYS LOST	AVG WKDYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	215	3	218	72.67	5.80
2	358	3	153	51.00	4.07
3	326	4	160	40.00	3.19
4	146	59	1,261	21.37	1.70
5	136	5	106	21.20	1.69
6	125	374	6,627	17.72	1.41
7	140	116	1,872	16.14	1.29
8	115	30	484	16.13	1.29
9	101	62	844	13.61	1.09
10	330	18	241	13.39	1.07
	AVG	1,497	18,769	12.54	1.00
11	178	20	248	12.40	0.99
12	226	3	33	11.00	0.88
13	242	3	32	10.67	0.85
14	363	5	51	10.20	0.81
15	236	80	797	9.96	0.79
16	186	57	550	9.65	0.77
17	295	15	136	9.07	0.72
18	235.	31	265	8.55	0.68
19	217	159	1,292	8.13	0.65
20	170	331	2,648	8.00	0.64
21	191	106	697	6.58	0.52
LOWEST	283	13	54	4.15	0.33

EXHIBIT 25C PAGE 1

DIRECT COSTS BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
SOUTHERN REGION

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED
DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.
TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

AVG DIRECT COST PER OSHA RECORDABLE INJ

IRIS USER NO.	NO OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)
326	5	7, 14	20.32
242	3	2,385	6.91
215	3	1,903	5.53
358	6	743	2.15
140	157	697	2.02
136	6	631	1.97
115	44	540	1.57
125	464	499	1.45
146	145	432	1.25
236	140	386	1.12
AVG	2,854	345	1.00
178	33	313	0.91
330	28	301	0.87
101	191	291	0.84
295	28	282	0.82
235	65	277	0.80
170	444	254	0.74
217	789	226	0.65
186	100	218	0.63
191	151	179	0.52
363	14	160	0.46
226	9	148	0.43
283	29	137	0.40

DIRECT COST PER MAN YEAR

IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
326	60,369	1,162	10.00
358	28,868	309	2.66
140	727,969	301	2.59
236	459,230	235	2.03
115	287,610	171	1.47
125	3,254,797	142	1.23
191	457,660	118	1.01
AVG	17,008,100	116	1.00
146	1,093,028	115	0.99
217	3,177,013	113	0.97
235	335,489	107	0.92
330	169,030	100	0.86
170	2,371,813	95	0.82
101	1,584,010	71	0.61
295	255,767	62	0.53
215	185,995	62	0.53
242	332,809	43	0.37
283	186,941	43	0.37
186	1,032,915	42	0.36
226	67,357	40	0.34
136	222,554	37	0.32
178	580,297	36	0.31
363	136,497	33	0.28

EXHIBIT 26A

AVERAGE INJURY RATES BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
NORTH EASTERN REGION

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE.
OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

	OSHA INCIDENCE RATE				INCIDENCE RATE - LWC				SEVERITY RATE		
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATIO
354	29,078	21	144	4.65	354	6	41	2.18	316	528	1.93
299	269,542	80	59	1.91	339	55	32	1.71	354	447	1.64
333	62,040	15	48	1.56	337	49	31	1.65	179	369	1.35
316	1,463,108	352	48	1.55	316	226	31	1.63	337	290	1.06
275	120,613	27	45	1.44	275	17	28	1.49	362	277	1.01
347	120,753	23	38	1.23	338	31	23	1.20	275	275	1.01
339	339,743	63	37	1.19	347	13	22	1.14	AVG	273	1.00
337	313,454	51	33	1.05	AVG	644	19	1.00	333	245	0.90
AVG	6,801,602	1057	31	1.00	179	113	17	0.92	339	242	0.89
201	202,157	31	31	0.99	299	23	17	0.90	201	211	0.77
179	1,300,545	197	30	0.97	362	14	14	0.75	299	180	0.66
338	273,260	32	23	0.75	272	23	12	0.64	338	163	0.60
362	198,431	20	20	0.65	333	3	10	0.51	347	146	0.53
272	377,155	37	20	0.63	182	38	9	0.47	323	131	0.48
323	163,617	11	13	0.43	201	9	9	0.47	272	99	0.36
182	845,334	55	13	0.42	323	5	6	0.32	182	68	0.25
148	722,766	42	12	0.37	148	19	5	0.28	148	66	0.24

EXHIBIT 26B

AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
NORTH EASTERN REGION

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO LOST WKDY CASES	DAYS LOST	AVG WKDYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	333	3	76	25.33	1.76
2	201	9	213	23.67	1.64
3	323	5	107	21.40	1.48
4	179	113	2,399	21.23	1.47
5	362	14	275	19.64	1.36
6	316	226	3,862	17.09	1.18
	AVG	644	9,292	14.43	1.00
7	148	19	237	12.47	0.86
8	354	6	65	10.83	0.75
9	299	23	243	10.57	0.73
10	275	17	166	9.76	0.68
11	337	49	454	9.27	0.64
12	272	23	187	8.13	0.56
13	182	38	286	7.53	0.52
14	339	55	411	7.47	0.52
15	336	31	223	7.19	0.50
LOWEST	347	13	88	6.77	0.47

EXHIBIT 26C

DIRECT COSTS BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
NORTH EASTERN REGION

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED
DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.
TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

AVG DIRECT COST PER OSHA RECORDABLE INJ

IRIS USER NO.	NO OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)
337	51	803	1.81
362	20	802	1.80
316	352	581	1.31
338	32	572	1.29
339	63	545	1.23
179	197	476	1.07
AVG	1,057	445	1.00
323	11	317	0.71
148	42	238	0.54
201	31	223	0.50
354	21	201	0.45
272	37	198	0.45
182	55	196	0.44
275	27	181	0.41
333	15	161	0.36
347	23	138	0.31
299	80	110	0.25

DIRECT COST PER MAN YEAR

IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
354	29,078	290	2.10
316	1,463,108	280	2.02
337	313,454	261	1.89
339	339,743	202	1.46
362	198,431	162	1.17
179	1,300,545	144	1.04
AVG	6,801,602	138	1.00
338	273,260	134	0.97
275	120,613	81	0.59
333	62,040	78	0.56
201	202,157	68	0.49
299	269,542	65	0.47
347	120,753	53	0.38
323	163,617	44	0.32
272	377,155	39	0.28
148	722,766	28	0.20
182	845,334	26	0.18

EXHIBIT 27A

AVERAGE INJURY RATES BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
ONE MAN

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE. OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES. SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

OSHA INCIDENCE RATE					INCIDENCE RATE - LWC				SEVERITY RATE		
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATIO
197	1,825	2	219	6.61	197	2	219	11.96	197	40,438	120.84
103	1,825	2	219	6.61	221	2	192	10.47	244	9,925	29.66
221	2,086	2	192	5.79	125	10	148	8.05	125	2,537	7.58
125	13,557	13	192	5.79	210	8	136	7.44	341	2,403	7.18
328	3,911	3	153	4.63	103	1	110	5.98	210	1,722	5.15
210	11,732	9	153	4.63	325	10	90	4.94	103	1,534	4.58
115	4,589	3	131	3.94	115	2	87	4.76	133	1,208	3.61
325	22,109	12	109	3.27	341	3	69	3.78	221	1,151	3.44
341	8,656	4	92	2.79	324	3	66	3.59	348	1,075	3.21
265	6,570	3	91	2.75	348	6	58	3.17	111	966	2.89
172	217,957	97	89	2.68	328	1	51	2.79	296	891	2.66
343	25,029	11	88	2.65	111	9	50	2.71	324	877	2.62
324	9,125	4	88	2.64	244	1	48	2.62	201	633	1.89
146	58,035	20	69	2.08	343	5	40	2.18	363	619	1.85
355	20,857	7	67	2.02	296	9	36	1.96	172	526	1.57
316	6,257	2	64	1.93	172	38	35	1.90	146	472	1.41
348	20,649	6	58	1.75	344	1	32	1.74	236	384	1.15
111	36,239	9	50	1.50	146	9	31	1.69	115	349	1.04
244	4,171	1	48	1.45	133	2	29	1.59	325	335	1.00
191	10,011	2	40	1.21	363	1	20	1.09	AVG	335	1.00
296	50,057	10	40	1.21	355	2	19	1.05	292	177	0.53
363	10,020	2	40	1.20	283	1	19	1.05	113	170	0.51
201	20,857	4	38	1.16	201	2	19	1.05	179	156	0.47
AVG	1,659,080	275	33	1.00	AVG	152	18	1.00	343	136	0.41
344	6,257	1	32	0.96	109	3	16	0.87	182	104	0.31
133	13,742	2	29	0.88	182	6	13	0.73	344	96	0.29
113	28,314	3	21	0.64	170	4	10	0.53	170	90	0.27
182	90,103	9	20	0.60	236	1	10	0.52	260	83	0.25
204	50,057	5	20	0.60	204	2	8	0.44	283	77	0.23

OSHA INCIDENCE RATE

IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO
283	10,429	1	19	0.58
236	20,857	2	19	0.58
336	32,016	3	19	0.57
292	79,257	7	18	0.53
109	37,543	3	16	0.48
170	82,177	5	12	0.37
340	19,554	1	10	0.31
179	30,764	1	7	0.20
260	31,286	1	6	0.19
235	33,371	1	6	0.18
217	223,171	2	2	0.05

INCIDENCE RATE - LWC

IRIS USER NO.	NO. INJ	RATE	AVG RATIO
292	3	8	0.41
113	1	7	0.39
179	1	7	0.35
260	1	6	0.35
336	1	6	0.34
235	1	6	0.33

SEVERITY RATE

IRIS USER NO.	RATE	AVG RATIO
204	64	0.19
328	51	0.15
109	48	0.14
355	48	0.14
336	12	0.04
235	6	0.02

EXHIBIT 27B

AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
ONE MAN

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO LOST WKDY CASES	DAYS LOST	AVG WKDYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	244	1	207	207.00	11.33
2	197	2	369	184.50	10.10
3	133	2	83	41.50	2.27
4	236	1	40	40.00	2.19
5	341	3	104	34.67	1.90
6	201	2	66	33.00	1.81
7	363	1	31	31.00	1.70
8	296	9	223	24.78	1.36
9	179	1	24	24.00	1.31
10	113	1	24	24.00	1.31
11	292	3	70	23.33	1.28
12	111	9	175	19.44	1.06
13	348	6	111	18.50	1.01
	AVG	152	2,776	18.26	1.00
14	125	10	172	17.20	0.94
15	146	9	137	15.22	0.83
16	172	38	573	15.08	0.83
17	103	1	14	14.00	0.77
18	324	3	40	13.33	0.73
19	260	1	13	13.00	0.71
20	210	8	101	12.62	0.69
21	170	4	37	9.25	0.51
22	204	2	16	8.00	0.44
23	182	6	47	7.83	0.43
24	221	2	12	6.00	0.33
25	283	1	4	4.00	0.22
26	115	2	8	4.00	0.22
27	325	10	37	3.70	0.20
28	343	5	17	3.40	0.19
29	344	1	3	3.00	0.16
30	109	3	9	3.00	0.16
31	355	2	5	2.50	0.14
32	336	1	2	2.00	0.11
33	328	1	1	1.00	0.05
LOWEST	235	1	1	1.00	0.05

EXHIBIT 27C

DIRECT COSTS BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
ONE MAN

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED. DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

AVG DIRECT COST/OSHA RECORDABLE INJ

IRIS USER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)
197	2	44,358	57.79
244	1	14,907	19.42
236	2	3,612	4.71
133	2	2,337	3.04
296	10	1,227	1.60
341	4	966	1.26
111	9	793	1.03
AVG	275	768	1.00
179	1	739	0.96
103	2	715	0.93
260	1	709	0.92
348	6	703	0.92
201	4	694	0.90
210	9	664	0.87
363	2	558	0.73
292	7	520	0.68
125	13	451	0.59
113	3	442	0.58
146	20	404	0.53
325	12	377	0.49
221	2	335	0.44
324	4	311	0.40
170	5	309	0.40
172	97	237	0.31
204	5	219	0.28
109	3	198	0.26
283	1	177	0.23
182	9	147	0.19
344	1	141	0.18
115	3	112	0.15
343	11	85	0.11

DIRECT COST PER MAN YEAR

IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
244	4,171	7,147.19	28.07
103	1,825	1,568.22	6.16
210	11,732	1,019.08	4.00
341	8,656	908.07	3.57
125	13,557	865.82	3.40
236	20,857	692.71	2.72
133	13,742	680.26	2.67
221	2,086	643.42	2.53
296	50,057	490.44	1.93
325	22,109	409.61	1.61
348	20,649	408.74	1.61
111	36,239	393.88	1.55
324	9,125	283.40	1.11
146	58,035	278.38	1.09
201	20,857	266.29	1.05
AVG	1,659,080	254.63	1.00
363	10,020	222.75	0.87
172	217,957	210.51	0.83
115	4,589	146.01	0.57
328	3,911	128.37	0.50
113	28,314	93.67	0.37
292	79,257	91.78	0.36
343	25,029	74.79	0.29
179	30,764	48.04	0.19
260	31,286	45.32	0.18
344	6,257	45.07	0.18
204	50,057	43.67	0.17
265	6,570	38.66	0.15
170	82,177	37.63	0.15
283	10,429	33.95	0.13
109	37,543	31.59	0.12

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AVG DIRECT COST/OSHA RECORDABLE INJ !      DIRECT COST PER  MAN YEAR
------------------------------------!------------------------------------------
IRIS  NO. OSHA  AVG    AVG RATIO    ! IRIS    MAN-HRS    COSTS   AVG RATIO
USER   RECORD   COST (AVG COST/AVG) ! USER   EXPOSURE   PER M-Y (COSTS/AVG)
 NO.    INJ                         !  NO.
                                    !
 328      3      84       0.11      !  182     90,103     29.79       0.12
 235      1      83       0.11      !  355     20,857     14.38       0.06
 340      1      55       0.07      !  316      6,257     10.87       0.04
 265      3      42       0.06      !  191     10,011      7.99       0.03
 217      2      42       0.05      !  340     19,554      5.63       0.02
 355      7      21       0.03      !  235     33,371      4.97       0.02
 336      3      20       0.03      !  336     32,016      3.75       0.01
 191      2      20       0.03      !  217    223,171      0.75       0.00
 316      2      17       0.02      !  217    223,171      0.00       0.00
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EXHIBIT 28A

AVERAGE INJURY RATES BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
TWO MAN

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE.
OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

OSHA INCIDENCE RATE					INCIDENCE RATE - LWC				SEVERITY RATE		
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATIO
217	271,143	514	379	4.35	125	3	192	4.35	341	1,982	4.02
149	51,204	54	211	2.42	341	37	140	3.18	210	1,893	3.84
125	3,129	3	192	2.20	149	32	125	2.84	149	1,426	2.89
341	52,769	43	163	1.87	210	4	101	2.29	103	1,307	2.65
210	7,926	6	151	1.74	221	130	96	2.19	221	1,228	2.49
111	255,500	159	124	1.43	325	18	86	1.96	125	1,215	2.46
157	50,057	31	124	1.42	344	20	80	1.81	328	1,199	2.43
351	9,699	6	124	1.42	103	17	79	1.80	344	939	1.90
103	42,861	26	121	1.39	348	15	73	1.65	359	880	1.78
152	69,634	40	115	1.32	157	18	72	1.63	350	795	1.61
299	52,983	30	113	1.30	111	88	69	1.56	172	787	1.59
211	66,743	33	99	1.14	265	88	64	1.45	325	767	1.55
221	269,891	131	97	1.11	359	6	63	1.43	111	766	1.55
329	6,257	3	96	1.10	217	84	62	1.41	265	671	1.36
359	19,083	9	94	1.08	351	3	62	1.40	152	663	1.34
325	41,714	19	91	1.05	152	21	60	1.37	348	605	1.23
172	82,386	36	87	1.00	211	20	60	1.36	AVG	493	1.00
AVG	3,630,080	1581	87	1.00	244	13	57	1.29	299	476	0.96
265	275,210	117	85	0.98	328	1	48	1.09	260	447	0.91
244	45,886	19	83	0.95	235	1	48	1.09	235	432	0.87
348	41,297	17	82	0.95	AVG	800	44	1.00	146	402	0.81
344	50,057	20	80	0.92	350	14	43	0.98	197	390	0.79
236	8,343	3	72	0.83	182	1	40	0.91	157	360	0.73
350	64,866	21	65	0.74	336	4	38	0.87	211	354	0.72
358	6,779	2	59	0.68	172	15	36	0.83	217	350	0.71
207	58,400	15	51	0.59	260	43	33	0.74	133	338	0.68
346	79,257	20	50	0.58	329	1	32	0.73	207	291	0.59
336	20,857	5	48	0.55	186	1	32	0.73	351	289	0.59
328	4,171	1	48	0.55	207	9	31	0.70	244	257	0.52

OSHA INCIDENCE RATE

IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO
235	4,171	1	48	0.55
260	262,800	61	46	0.53
146	200,229	42	42	0.48
182	5,006	1	40	0.46
133	75,198	14	37	0.43
349	101,679	17	33	0.38
186	6,257	1	32	0.37
197	110,126	16	29	0.33
161	27,114	3	22	0.25
115	65,074	7	22	0.25
324	10,950	1	18	0.21
355	95,943	8	17	0.19
316	203,566	14	14	0.16
283	75,086	5	13	0.15
183	16,686	1	12	0.14
113	19,606	1	10	0.12
242	22,421	1	9	0.10
292	67,369	2	6	0.07
178	183,960	2	2	0.02

INCIDENCE RATE - LWC

IRIS USER NO.	NO. INJ	RATE	AVG RATIO
299	8	30	0.69
358	1	30	0.67
346	11	28	0.63
197	15	27	0.62
236	1	24	0.54
133	9	24	0.54
146	20	20	0.45
355	6	13	0.28
349	6	12	0.27
115	3	9	0.21
242	1	9	0.20
316	8	8	0.18
161	1	7	0.17
283	2	5	0.12
292	1	3	0.07

SEVERITY RATE

IRIS USER NO.	RATE	AVG RATIO
349	236	0.48
355	133	0.27
346	106	0.21
336	105	0.21
316	91	0.19
358	89	0.18
115	80	0.16
182	80	0.16
186	64	0.13
161	59	0.12
242	36	0.07
329	32	0.06
236	24	0.05
292	12	0.02
283	11	0.02

EXHIBIT 28B

AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
TWO MAN

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO LOST WKDY CASES	DAYS LOST	AVG WKDYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	328	1	25	25.00	2.23
2	172	15	324	21.60	1.93
3	146	20	402	20.10	1.79
4	349	6	120	20.00	1.78
5	210	4	75	18.75	1.67
6	350	14	258	18.43	1.64
7	103	17	280	16.47	1.47
8	341	26	413	15.88	1.42
9	299	8	126	15.75	1.40
10	197	15	215	14.33	1.28
11	133	9	127	14.11	1.26
12	359	6	84	14.00	1.25
13	260	43	588	13.67	1.22
14	221	130	1,657	12.75	1.14
15	344	20	235	11.75	1.05
16	316	8	93	11.62	1.04
17	149	32	365	11.41	1.02
	AVG	789	8,845	11.21	1.00
18	111	88	979	11.12	0.99
19	152	21	231	11.00	0.98
20	355	6	64	10.67	0.95
21	265	88	923	10.49	0.94
22	207	9	85	9.44	0.84
23	235	1	9	9.00	0.80
24	325	18	160	8.89	0.79
25	115	3	26	8.67	0.77
26	348	15	125	8.33	0.74
27	161	1	8	8.00	0.71
28	125	3	19	6.33	0.56
29	211	20	118	5.90	0.53
30	217	84	474	5.64	0.50
31	157	18	90	5.00	0.45
32	351	3	14	4.67	0.42
33	244	13	59	4.54	0.40
34	292	1	4	4.00	0.36
35	242	1	4	4.00	0.36
36	346	11	42	3.82	0.34
37	358	1	3	3.00	0.27
38	336	4	11	2.75	0.25
39	283	2	4	2.00	0.18

RANK	IRIS USER NO.	NO LOST WKDY CASES	DAYS LOST	AVG WKDYS LOST	AVG RATIO (DAYS / AVG)
40	186	1	2	2.00	0.18
41	182	1	2	2.00	0.18
42	329	1	1	1.00	0.09
LOWEST	236	1	1	1.00	0.09

EXHIBIT 28C

DIRECT COSTS BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
TWO MAN

EPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

EFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES,
ORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS
E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED.
IRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION
MPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.

NSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE
OW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

VG DIRECT COST/OSHA RECORDABLE INJ				DIRECT COST PER MAN YEAR			
RIS SER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)	IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
103	26	1,354	4.30	103	42,861	1,645.02	5.98
210	6	995	3.16	210	7,926	1,507.25	5.48
341	43	740	2.35	341	52,769	1,208.75	4.39
325	19	688	2.18	149	51,204	720.53	2.62
146	42	607	1.93	325	41,714	629.09	2.29
221	131	600	1.90	221	269,891	585.85	2.13
172	36	528	1.67	111	255,500	511.00	1.86
350	21	519	1.65	172	82,386	461.15	1.68
344	20	502	1.59	344	50,057	400.82	1.46
133	14	487	1.55	125	3,129	396.99	1.44
355	8	487	1.55	152	69,634	395.95	1.44
197	16	474	1.51	217	271,143	367.70	1.34
328	1	458	1.45	350	64,866	336.14	1.22
111	159	410	1.30	348	41,297	297.21	1.08
348	17	361	1.15	AVG	3,630,080	275.05	1.00
316	14	360	1.14	265	275,210	256.03	0.93
235	1	345	1.09	146	200,229	254.66	0.93
152	40	344	1.09	157	50,057	239.05	0.87
149	54	342	1.08	328	4,171	219.59	0.80
AVG	1,581	315	1.00	211	66,743	207.27	0.75
260	61	310	0.98	359	19,083	202.06	0.73
265	117	301	0.96	244	45,886	193.83	0.70
349	17	257	0.82	351	9,699	186.42	0.68
244	19	234	0.74	133	75,198	181.49	0.66
358	2	227	0.72	235	4,171	165.41	0.60
359	9	214	0.68	299	52,983	145.03	0.53
211	33	206	0.65	260	262,800	143.74	0.52
115	7	201	0.64	197	110,126	137.88	0.50
125	3	194	0.62	358	6,779	133.95	0.49
157	31	193	0.61	349	101,679	86.04	0.31
92	2	174	0.55	355	95,943	81.26	0.30

AVG DIRECT COST/OSHA RECORDABLE INJ

IRIS USER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)
242	1	174	0.55
351	6	151	0.48
207	15	139	0.44
299	30	128	0.41
161	3	103	0.33
217	514	97	0.31
346	20	86	0.27
182	1	85	0.27
186	1	77	0.24
236	3	73	0.23
329	3	66	0.21
113	1	62	0.20
283	5	62	0.20
178	2	25	0.08
324	1	20	0.06
336	5	20	0.06
183	1	20	0.06

DIRECT COST PER MAN YEAR

IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
207	58,400	71.40	0.26
329	6,257	63.29	0.23
236	8,343	52.74	0.19
316	203,566	49.55	0.18
115	65,074	45.46	0.17
346	79,257	43.40	0.16
182	5,006	33.96	0.12
186	6,257	24.61	0.09
161	27,114	22.79	0.08
242	22,421	15.52	0.06
292	67,369	10.36	0.04
336	20,857	9.59	0.03
283	75,086	8.20	0.03
113	19,606	6.32	0.02
324	10,950	3.65	0.01
183	16,686	2.40	0.01
178	183,960	0.55	0.00

EXHIBIT 29A

AVERAGE INJURY RATES BY 'IRIS' USERS RANKED FROM HIGHEST TO LOWEST
THREE MAN

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE.
OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
) GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
) POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

OSHA INCIDENCE RATE					INCIDENCE RATE - LWC				SEVERITY RATE		
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATIO
103	59,130	67	227	5.44	325	5	160	6.03	325	2,014	6.03
325	6,257	6	192	4.60	103	47	159	6.00	316	1,093	3.27
236	70,080	58	166	3.97	191	65	70	2.63	318	1,015	3.04
299	69,184	43	124	2.98	146	3	68	2.58	103	954	2.86
146	8,760	5	114	2.74	318	17	68	2.56	358	922	2.76
354	43,018	21	98	2.34	236	23	66	2.48	326	858	2.57
341	6,257	3	96	2.30	341	2	64	2.41	362	728	2.18
318	50,057	23	92	2.21	171	125	62	2.35	125	709	2.13
191	186,463	85	91	2.19	197	1	61	2.30	146	639	1.92
207	220,564	97	88	2.11	316	136	58	2.18	191	546	1.64
183	345,081	148	86	2.06	339	40	58	2.17	179	542	1.62
316	470,537	196	83	2.00	183	95	55	2.08	171	536	1.61
171	402,021	165	82	1.97	235	24	51	1.93	235	516	1.55
339	138,909	47	68	1.62	125	154	51	1.92	181	511	1.53
352	42,120	14	66	1.60	181	2	43	1.61	295	476	1.42
235	93,857	31	66	1.59	337	29	42	1.58	339	459	1.38
197	3,285	1	61	1.46	299	14	40	1.53	172	418	1.25
125	605,379	179	59	1.42	207	44	40	1.51	207	403	1.21
172	664,040	192	58	1.39	362	14	37	1.40	341	384	1.15
333	39,107	11	56	1.35	161	14	29	1.09	333	378	1.13
161	96,673	26	54	1.29	354	6	28	1.05	337	376	1.13
275	59,130	15	51	1.22	275	8	27	1.02	236	371	1.11
362	75,555	18	48	1.14	AVG	1273	27	1.00	340	358	1.07
337	138,909	31	45	1.07	179	75	26	0.97	AVG	334	1.00
181	9,386	2	43	1.02	172	83	25	0.94	299	332	1.00
AVG	9,604,900	2001	42	1.00	338	16	23	0.87	109	329	0.99
179	585,825	120	41	0.98	237	22	23	0.86	275	318	0.95
237	193,189	39	40	0.97	186	30	22	0.84	352	313	0.94
186	269,057	48	36	0.86	109	24	21	0.80	354	302	0.91

OSHA INCIDENCE RATE

IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO
148	175,200	25	29	0.68
182	303,159	42	28	0.67
330	118,886	15	25	0.61
201	89,164	11	25	0.59
358	32,537	4	25	0.59
170	103,243	12	23	0.56
226	77,745	9	23	0.56
338	138,909	16	23	0.55
109	225,257	25	22	0.53
326	36,604	4	22	0.52
261	10,011	1	20	0.48
340	407,966	40	20	0.47
331	32,850	3	18	0.44
292	249,660	22	18	0.42
347	36,698	3	16	0.39
295	12,617	1	16	0.38
323	108,874	8	15	0.35
115	365,574	26	14	0.34
353	62,571	3	10	0.23
204	43,800	2	9	0.22
272	159,557	6	8	0.18
178	825,474	26	6	0.15
260	171,289	4	5	0.11
242	68,516	1	3	0.07

INCIDENCE RATE - LWC

IRIS USER NO.	NO. INJ	RATE	AVG RATIO
261	1	20	0.75
182	30	20	0.75
330	11	19	0.70
326	3	16	0.62
295	1	16	0.60
148	12	14	0.52
358	2	12	0.46
170	6	12	0.44
201	5	11	0.42
347	2	11	0.41
333	2	10	0.39
352	2	9	0.36
115	17	9	0.35
340	18	9	0.33
226	3	8	0.29
292	9	7	0.27
353	2	6	0.24
323	3	6	0.21
272	4	5	0.19
204	1	5	0.17
178	16	4	0.15
260	3	4	0.13
242	1	3	0.11

SEVERITY RATE

IRIS USER NO.	RATE	AVG RATIO
183	280	0.84
330	217	0.65
237	206	0.62
201	193	0.58
323	191	0.57
261	180	0.54
161	174	0.52
148	168	0.50
338	154	0.46
182	144	0.43
186	131	0.39
115	130	0.39
197	122	0.36
170	114	0.34
292	101	0.30
260	95	0.28
204	91	0.27
347	87	0.26
226	85	0.25
353	58	0.17
178	45	0.13
272	43	0.13
242	9	0.03

EXHIBIT 29B

AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
THREE MAN

EPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

NSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE
OW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO LOST WKDY CASES	DAYS LOST	AVG WKDYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	358	2	150	75.00	6.01
2	326	3	157	52.33	4.20
3	340	18	731	40.61	3.26
4	333	2	74	37.00	2.97
5	323	3	104	34.67	2.78
6	352	2	66	33.00	2.65
7	295	1	30	30.00	2.41
8	260	3	81	27.00	2.16
9	179	57	1,204	21.12	1.69
10	204	1	20	20.00	1.60
11	362	14	275	19.64	1.58
12	316	136	2,571	18.90	1.52
13	201	5	86	17.20	1.38
14	172	83	1,387	16.71	1.34
15	109	24	371	15.46	1.24
16	318	17	254	14.94	1.20
17	292	9	126	14.00	1.12
18	115	17	238	14.00	1.12
19	125	154	2,147	13.94	1.12
20	325	5	63	12.60	1.01
	AVG	1,251	15,602	12.47	1.00
21	148	12	147	12.25	0.98
22	181	2	24	12.00	0.96
23	275	8	94	11.75	0.94
24	330	11	129	11.73	0.94
25	178	16	185	11.56	0.93
26	226	3	33	11.00	0.88
27	207	44	444	10.09	0.81
28	235	24	242	10.08	0.81
29	170	6	59	9.83	0.79
30	146	3	28	9.33	0.75
31	237	22	199	9.05	0.73
32	353	2	18	9.00	0.72
33	337	29	261	9.00	0.72
34	261	1	9	9.00	0.72
35	171	125	1,077	8.62	0.69
36	272	4	34	8.50	0.68
37	299	14	115	8.21	0.66
38	347	2	16	8.00	0.64
39	339	40	319	7.98	0.64

RANK	IRIS USER NO.	NO LOST WKDY CASES	DAYS LOST	AVG WKDYS LOST	AVG RATIO (DAYS / AVG)
40	191	65	509	7.83	0.63
41	354	3	23	7.67	0.61
42	182	30	219	7.30	0.59
43	338	16	107	6.69	0.54
44	341	2	12	6.00	0.48
45	161	14	84	6.00	0.48
46	103	47	282	6.00	0.48
47	186	30	176	5.87	0.47
48	236	23	130	5.65	0.45
49	183	94	483	5.14	0.41
50	111	1	4	4.00	0.32
51	242	1	3	3.00	0.24
LOWEST	197	1	2	2.00	0.16

EXHIBIT 29C

DIRECT COSTS BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
THREE MAN

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED. DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

AVG DIRECT COST/OSHA RECORDABLE INJ				DIRECT COST PER MAN YEAR			
IRIS USER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)	IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
326	4	8,539	21.93	326	36,604	1,866.34	11.48
295	1	2,968	7.62	325	6,257	1,214.93	7.47
260	4	1,234	3.17	146	8,760	598.40	3.68
358	4	1,001	2.57	316	470,537	580.86	3.57
261	1	960	2.47	103	59,130	518.86	3.19
362	18	889	2.28	318	50,057	492.64	3.03
109	25	838	2.15	295	12,617	470.47	2.89
337	31	769	1.97	341	6,257	464.75	2.86
204	2	699	1.80	236	70,080	439.35	2.70
316	196	697	1.79	362	75,555	423.45	2.60
340	40	688	1.77	339	138,909	378.88	2.33
325	6	633	1.63	337	138,909	343.07	2.11
181	2	594	1.53	235	93,857	338.15	2.08
339	47	560	1.44	181	9,386	253.36	1.56
318	23	536	1.38	125	605,379	253.07	1.56
146	5	520	1.34	358	32,537	246.00	1.51
235	31	512	1.31	171	402,021	240.69	1.48
179	120	495	1.27	191	186,463	227.06	1.40
338	16	487	1.25	179	585,825	202.77	1.25
341	3	485	1.24	354	43,018	196.06	1.21
125	179	428	1.10	261	10,011	191.78	1.18
323	8	411	1.06	109	225,257	190.08	1.17
AVG	2,001	389	1.00	172	664,040	182.39	1.12
237	39	384	0.99	352	42,120	170.61	1.05
115	26	371	0.95	AVG	9,604,900	162.60	1.00
330	15	323	0.83	237	193,189	157.29	0.97
172	192	315	0.81	183	345,081	152.10	0.94
171	165	293	0.75	207	220,564	148.11	0.91
236	58	265	0.68	340	407,966	134.84	0.83
178	26	262	0.67	299	69,184	132.55	0.82
352	14	257	0.66	338	138,909	112.23	0.69

AVG DIRECT COST/OSHA RECORDABLE INJ

IRIS USER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)
148	25	253	0.65
191	85	249	0.64
170	12	231	0.59
272	6	225	0.58
103	67	222	0.57
275	15	211	0.54
182	42	205	0.53
354	21	201	0.52
333	11	199	0.51
201	11	189	0.48
183	148	177	0.46
207	97	168	0.43
353	3	163	0.42
186	48	163	0.42
161	26	159	0.41
226	9	148	0.38
197	1	144	0.37
292	22	124	0.32
299	43	107	0.27
242	1	104	0.27
347	3	37	0.10
331	3	30	0.08
329	0	0	0.00

DIRECT COST PER MAN YEAR

IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
333	39,107	111.80	0.69
275	59,130	107.19	0.66
197	3,285	87.67	0.54
161	96,673	85.73	0.53
330	118,886	81.41	0.50
148	175,200	72.09	0.44
204	43,800	63.88	0.39
323	108,874	62.00	0.38
186	269,057	58.20	0.36
260	171,289	57.63	0.35
182	303,159	56.97	0.35
115	365,574	54.69	0.34
170	103,243	53.81	0.33
201	89,164	46.52	0.29
226	77,745	34.37	0.21
292	249,660	21.83	0.13
272	159,557	16.91	0.10
178	825,474	16.50	0.10
353	62,571	15.66	0.10
347	36,698	6.05	0.04
331	32,850	5.48	0.03
242	68,516	3.04	0.02
111	0	0.00	0.00

EXHIBIT 30A

AVERAGE INJURY RATES BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
FOUR MAN

EPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

EFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE.
SHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES /
AN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO
HE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR.
OES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL
REATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
EVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000.
OUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME
MPLOYEES PER YEAR.

NSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE
OW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

OSHA INCIDENCE RATE					INCIDENCE RATE - LWC				SEVERITY RATE		
RIS SER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATIO
170	137,657	367	533	7.61	170	274	398	8.20	170	2,817	7.21
347	43,081	18	84	1.19	181	87	53	1.10	181	510	1.31
AVG	2,039,830	715	70	1.00	AVG	495	49	1.00	AVG	391	1.00
181	325,372	111	68	0.97	347	10	46	0.96	347	279	0.71
101	425,486	99	47	0.66	109	92	19	0.39	109	161	0.41
295	28,389	5	35	0.50	295	2	14	0.29	101	158	0.41
363	80,160	12	30	0.43	101	26	12	0.25	295	77	0.20
109	976,115	103	21	0.30	363	4	10	0.21	363	50	0.13

EXHIBIT 30B

AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
FOUR MAN

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO LOST WKDY CASES	DAYS LOST	AVG WKDYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	101	26	337	12.96	1.61
2	181	87	830	9.54	1.19
3	109	92	788	8.57	1.06
	AVG	495	3,985	8.05	1.00
4	170	274	1,939	7.08	0.88
5	347	10	60	6.00	0.75
6	295	2	11	5.50	0.68
LOWEST	363	4	20	5.00	0.62

EXHIBIT 30C

DIRECT COSTS BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
FOUR MAN

EPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

EFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, ORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED. IRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION MPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.

NSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE OW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

VG DIRECT COST/OSHA RECORDABLE INJ				DIRECT COST PER MAN YEAR			
RIS SER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)	IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
109	103	579	2.02	170	137,657	1,190.31	5.85
181	111	395	1.37	181	325,372	269.32	1.32
AVG	715	287	1.00	AVG	2,039,830	203.60	1.00
170	367	223	0.78	109	976,115	126.83	0.62
101	99	158	0.55	347	43,081	120.38	0.59
347	18	144	0.50	101	425,486	73.33	0.36
295	5	139	0.48	295	28,389	48.82	0.24
363	12	94	0.33	363	80,160	28.14	0.14

EXHIBIT 31A

AVERAGE INJURY RATES BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
TASK

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE. OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES. SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

OSHA INCIDENCE RATE					INCIDENCE RATE - LWC				SEVERITY RATE		
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATIO
149	54,333	54	199	3.93	341	37	140	4.30	341	1,982	5.22
103	103,816	95	.83	3.62	103	65	125	3.84	210	1,791	4.72
341	52,769	43	163	3.22	210	12	122	3.74	149	1,344	3.54
210	19,658	15	153	3.02	149	32	118	3.61	221	1,227	3.23
111	279,225	167	120	2.36	221	132	97	2.97	103	1,110	2.92
299	122,167	73	120	2.36	191	58	87	2.65	244	1,063	2.80
152	69,634	40	115	2.27	111	96	69	2.11	197	1,017	2.68
191	133,903	76	114	2.24	348	21	68	2.08	125	843	2.22
351	11,471	6	105	2.07	265	88	64	1.95	179	838	2.21
328	8,082	4	99	1.96	171	125	62	1.90	111	825	2.17
211	66,743	33	99	1.95	152	21	60	1.85	350	795	2.09
221	271,977	133	98	1.93	211	20	60	1.84	358	778	2.05
354	43,018	21	98	1.93	125	163	60	1.83	348	762	2.01
157	68,829	31	90	1.78	244	14	56	1.71	191	726	1.91
265	276,305	119	86	1.70	181	89	53	1.63	265	668	1.76
183	361,767	149	82	1.63	183	95	53	1.61	152	663	1.75
171	402,021	165	82	1.62	351	3	52	1.60	362	660	1.74
207	278,964	112	80	1.59	157	18	52	1.60	359	653	1.72
244	50,057	20	80	1.58	328	2	49	1.52	328	643	1.69
348	61,946	23	74	1.47	235	25	48	1.47	326	626	1.65
172	716,182	263	73	1.45	359	6	47	1.43	171	536	1.41
359	25,747	9	70	1.38	350	14	43	1.32	181	510	1.34
125	546,980	190	69	1.37	179	73	41	1.26	235	481	1.27
181	334,757	113	68	1.33	170	314	39	1.18	172	476	1.25
352	42,120	14	66	1.31	207	53	38	1.16	133	472	1.24
179	354,050	115	65	1.28	299	22	36	1.10	146	425	1.12
350	64,866	21	65	1.28	362	14	34	1.03	324	399	1.05
235	104,286	32	61	1.21	AVG	2083	33	1.00	299	395	1.04
333	39,107	11	56	1.11	197	18	31	0.96	AVG	380	1.00

OSHA INCIDENCE RATE					INCIDENCE RATE - LWC				SEVERITY RATE		
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATIO
161	112,524	29	52	1.02	324	3	30	0.92	207	379	1.00
170	1,630,820	419	51	1.02	172	106	30	0.91	333	378	1.00
275	59,130	15	51	1.00	354	6	28	0.85	211	354	0.93
AVG	12,760,100	3228	51	1.00	275	8	27	0.83	340	342	0.90
146	267,024	67	50	0.99	347	12	27	0.82	275	318	0.84
101	200,229	50	50	0.99	161	15	27	0.82	352	313	0.83
324	20,075	5	50	0.98	133	11	25	0.76	260	313	0.82
347	89,999	21	47	0.92	346	11	24	0.73	170	311	0.82
346	91,771	20	44	0.86	146	32	24	0.73	354	302	0.80
362	83,376	18	43	0.85	182	30	23	0.71	183	267	0.70
186	269,057	49	36	0.72	186	31	23	0.71	157	262	0.69
133	88,939	16	36	0.71	260	46	22	0.66	351	244	0.64
197	115,236	19	33	0.65	261	1	20	0.61	323	216	0.57
182	258,107	42	33	0.64	336	5	19	0.58	349	213	0.56
237	180,675	29	32	0.63	237	16	18	0.54	201	193	0.51
363	90,180	14	31	0.61	101	16	16	0.49	101	187	0.49
358	39,316	6	31	0.60	358	3	15	0.47	261	180	0.47
260	427,832	65	30	0.60	355	8	14	0.42	182	170	0.45
336	52,873	8	30	0.60	326	3	12	0.37	347	169	0.44
349	112,629	17	30	0.60	201	5	11	0.34	161	164	0.43
295	37,851	5	26	0.52	363	5	11	0.34	115	154	0.41
329	22,995	3	26	0.52	115	17	11	0.34	186	132	0.35
355	116,800	15	26	0.51	349	6	11	0.33	355	118	0.31
201	89,164	11	25	0.49	295	2	11	0.32	363	113	0.30
226	84,002	9	21	0.42	333	2	10	0.31	237	110	0.29
261	10,011	1	20	0.39	352	2	9	0.29	113	100	0.26
340	427,519	41	19	0.38	329	1	9	0.27	346	92	0.24
115	309,259	26	17	0.33	340	18	8	0.26	226	79	0.21
113	47,919	4	17	0.33	226	3	7	0.22	295	58	0.15
331	35,979	3	17	0.33	323	3	6	0.19	336	49	0.13
323	96,360	8	17	0.33	283	3	6	0.19	272	43	0.11
326	50,161	4	16	0.32	272	4	5	0.15	178	35	0.09
283	98,029	6	12	0.24	242	2	4	0.13	283	16	0.04
272	159,557	6	8	0.15	113	1	4	0.13	242	15	0.04
178	1,060,480	28	5	0.10	178	16	3	0.09	329	9	0.02
242	90,937	2	4	0.09							

EXHIBIT 31B

AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
TASK

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO LOST WKDY CASES	DAYS LOST	AVG WKDYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	326	3	157	52.33	4.53
2	358	3	153	51.00	4.41
3	340	18	731	40.61	3.51
4	333	2	74	37.00	3.20
5	323	3	104	34.67	3.00
6	352	2	66	33.00	2.85
7	197	18	586	32.56	2.82
8	113	1	24	24.00	2.08
9	349	6	120	20.00	1.73
10	179	56	1,116	19.93	1.72
11	362	14	275	19.64	1.70
12	133	11	210	19.09	1.65
13	244	14	266	19.00	1.64
14	350	14	258	18.43	1.59
15	146	32	567	17.72	1.53
16	201	5	86	17.20	1.49
17	172	106	1,703	16.07	1.39
18	341	26	413	15.88	1.37
19	210	12	176	14.67	1.27
20	260	46	669	14.54	1.26
21	125	163	2,305	14.14	1.22
22	359	6	84	14.00	1.21
23	115	17	238	14.00	1.21
24	324	3	40	13.33	1.15
25	328	2	26	13.00	1.12
26	221	132	1,669	12.64	1.09
27	111	96	1,152	12.00	1.04
28	275	8	94	11.75	1.02
29	101	16	187	11.69	1.01
30	178	16	185	11.56	1.00
	AVG	2, 51	23,709	11.56	1.00
31	149	32	365	11.41	0.99
32	348	21	236	11.24	0.97
33	226	3	33	11.00	0.95
34	152	21	231	11.00	0.95
35	299	22	241	10.95	0.95
36	265	88	923	10.49	0.91
37	363	5	51	10.20	0.88
38	235	25	251	10.04	0.87
39	207	53	529	9.98	0.86

RANK	IRIS USER NO.	NO LOST WKDY CASES	DAYS LOST	AVG WKDYS LOST	AVG RATIO (DAYS / AVG)
40	181	89	854	9.60	0.83
41	261	1	9	9.00	0.78
42	103	65	576	8.86	0.77
43	355	8	69	8.62	0.75
44	171	125	1,077	8.62	0.75
45	272	4	34	8.50	0.74
46	191	58	486	8.38	0.72
47	170	314	2,536	8.08	0.70
48	354	3	23	7.67	0.66
49	182	30	219	7.30	0.63
50	347	12	76	6.33	0.55
51	237	16	99	6.19	0.54
52	161	15	92	6.13	0.53
53	211	20	118	5.90	0.51
54	186	31	178	5.74	0.50
55	295	2	11	5.50	0.48
56	183	94	483	5.14	0.44
57	157	18	90	5.00	0.43
58	351	3	14	4.67	0.40
59	346	11	42	3.82	0.33
60	242	2	7	3.50	0.30
61	283	3	8	2.67	0.23
62	336	5	13	2.60	0.22
LOWEST	329	1	1	1.00	0.09

EXHIBIT 31C

DIRECT COSTS BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
TASK

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED. DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

AVG DIRECT COST/OSHA RECORDABLE INJ				DIRECT COST PER MAN YEAR			
IRIS USER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)	IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
326	4	8,539	22.59	197	115,236	1,674.00	8.74
197	19	5,076	13.43	326	50,161	1,361.92	7.11
244	20	968	2.56	210	19,658	1,215.90	6.35
261	1	960	2.54	341	52,769	1,208.75	6.31
362	18	889	2.35	103	103,816	1,001.85	5.23
210	15	797	2.11	244	50,057	773.28	4.04
358	6	743	1.96	149	54,333	679.04	3.54
341	43	740	1.96	221	271,977	586.29	3.06
133	16	719	1.90	111	279,225	517.47	2.70
340	41	672	1.78	152	69,634	395.95	2.07
221	133	596	1.58	362	83,376	383.73	2.00
103	95	542	1.43	350	64,866	336.14	1.75
146	67	540	1.43	348	61,946	334.39	1.75
350	21	519	1.37	179	354,050	322.64	1.68
235	32	507	1.34	235	104,286	310.95	1.62
179	115	497	1.31	191	133,903	301.98	1.58
348	23	450	1.19	125	546,980	300.68	1.57
125	190	433	1.14	146	267,024	271.09	1.41
111	167	432	1.14	181	334,757	268.87	1.40
323	8	411	1.09	133	88,939	258.56	1.35
181	113	398	1.05	265	276,305	255.79	1.33
AVG	3,228	378	1.00	171	402,021	240.69	1.26
115	26	371	0.98	358	39,316	226.68	1.18
260	65	367	0.97	211	66,743	207.27	1.08
113	4	347	0.92	172	716,182	206.51	1.08
152	40	344	0.91	354	43,018	196.06	1.02
149	54	342	0.90	261	10,011	191.78	1.00
265	119	297	0.79	AVG	12,760,100	191.61	1.00
171	165	293	0.78	328	8,082	175.45	0.92
172	263	281	0.74	157	68,829	173.85	0.91
237	29	271	0.72	352	42,120	170.61	0.89

AVG DIRECT COST/OSHA RECORDABLE INJ				DIRECT COST PER MAN YEAR			
IRIS USER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)	IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
355	15	270	0.71	351	11,471	157.61	0.82
191	76	266	0.70	359	25,747	149.77	0.78
349	17	257	0.68	183	361,767	145.20	0.76
352	14	257	0.68	299	122,167	137.96	0.72
170	419	256	0.68	207	278,964	132.05	0.69
324	5	253	0.67	170	1,630,820	131.69	0.69
178	28	245	0.65	324	20,075	130.81	0.68
272	6	225	0.59	340	427,519	128.93	0.67
359	9	214	0.57	333	39,107	111.80	0.58
275	15	211	0.56	260	427,832	111.37	0.58
211	33	206	0.54	275	59,130	107.19	0.56
182	42	205	0.54	237	180,675	88.82	0.46
354	21	201	0.53	101	200,229	85.22	0.44
333	11	199	0.53	161	112,524	79.15	0.41
157	31	193	0.51	349	112,629	77.67	0.41
201	11	189	0.50	323	96,360	70.05	0.37
328	4	177	0.47	355	116,800	69.32	0.36
183	149	176	0.47	182	258,107	66.92	0.35
101	50	171	0.45	115	309,259	64.24	0.34
207	112	164	0.44	347	89,999	60.09	0.31
186	49	161	0.43	186	269,057	58.77	0.31
363	14	160	0.42	113	47,919	57.93	0.30
161	29	154	0.41	363	90,180	49.77	0.26
351	6	151	0.40	201	89,164	46.52	0.24
226	9	148	0.39	346	91,771	37.48	0.20
242	2	139	0.37	295	37,851	36.62	0.19
295	5	139	0.37	226	84,002	31.81	0.17
347	21	129	0.34	329	22,995	17.22	0.09
299	73	115	0.31	272	159,557	16.91	0.09
346	20	86	0.23	178	1,060,480	12.94	0.07
283	6	81	0.21	283	98,029	9.90	0.05
329	3	66	0.17	242	90,937	6.11	0.03
331	3	30	0.08	336	52,873	6.05	0.03
336	8	20	0.05	331	35,979	5.00	0.03

EXHIBIT 32A

AVERAGE INJURY RATES BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
HOURLY

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE.
OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

OSHA INCIDENCE RATE					INCIDENCE RATE - LWC				SEVERITY RATE		
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATIO
217	533,143	516	194	4.11	237	6	96	4.21	237	1,598	5.83
237	12,514	10	160	3.39	325	33	94	4.14	341	1,556	5.68
236	99,280	63	127	2.69	344	21	75	3.28	318	1,015	3.70
325	70,080	37	106	2.24	318	17	68	2.98	344	845	3.08
341	14,913	7	94	1.99	341	5	67	2.95	316	783	2.86
318	50,057	23	92	1.95	339	40	58	2.53	325	742	2.71
343	25,029	11	88	1.87	236	25	50	2.21	296	563	2.05
344	56,314	21	75	1.58	316	144	42	1.86	295	476	1.73
339	138,909	47	68	1.44	337	29	42	1.83	339	459	1.68
316	680,359	212	62	1.32	343	5	40	1.76	201	452	1.65
172	258,629	63	49	1.03	217	84	32	1.38	172	449	1.64
AVG	5,887,920	1387	47	1.00	172	30	23	1.02	337	376	1.37
337	138,909	31	45	0.95	338	16	23	1.01	236	344	1.26
265	5,475	1	37	0.78	AVG	670	23	1.00	AVG	274	1.00
191	62,571	11	35	0.75	296	9	23	1.00	330	217	0.79
111	41,714	7	34	0.71	191	7	22	0.98	109	189	0.69
148	175,200	25	29	0.61	109	119	19	0.84	217	178	0.65
201	29,200	4	27	0.58	330	11	19	0.81	148	168	0.61
101	368,857	49	27	0.56	295	1	16	0.70	338	154	0.56
330	118,886	15	25	0.54	111	3	14	0.63	343	136	0.50
296	79,257	10	25	0.54	201	2	14	0.60	111	115	0.42
338	138,909	16	23	0.49	148	12	14	0.60	292	101	0.37
109	1,238,910	131	21	0.45	125	4	11	0.47	179	98	0.36
115	125,977	10	16	0.34	182	7	9	0.41	125	88	0.32
295	12,617	1	16	0.34	115	5	8	0.35	101	81	0.30
292	396,286	31	16	0.33	235	1	7	0.32	204	77	0.28
204	93,857	7	15	0.32	292	13	7	0.29	191	74	0.27
182	150,171	10	13	0.28	204	3	6	0.28	186	69	0.25
125	75,086	5	13	0.28	353	2	6	0.26	260	69	0.25

OSHA INCIDENCE RATE

IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO
353	67,160	3	9	0.19
235	27,114	1	7	0.16
260	37,543	1	5	0.11
179	262,539	6	5	0.10
170	68,829	1	3	0.06
186	98,029	1	2	0.04

INCIDENCE RATE - LWC

IRIS USER NO.	NO. INJ	RATE	AVG RATIO
101	10	5	0.24
260	1	5	0.23
170	1	3	0.13
179	3	2	0.10
186	1	2	0.09

SEVERITY RATE

IRIS USER NO.	RATE	AVG RATIO
182	65	0.24
115	54	0.20
353	54	0.20
235	7	0.03
170	3	0.01

EXHIBIT 32B

AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
HOURLY

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO LOST WKDY CASES	DAYS LOST	AVG WKDYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	179	2	112	56.00	4.65
2	186	1	34	34.00	2.82
3	201	2	66	33.00	2.74
4	295	1	30	30.00	2.49
5	296	9	223	24.78	2.06
6	341	5	116	23.20	1.93
7	172	30	581	19.37	1.61
8	316	144	2,664	18.50	1.54
9	237	6	100	16.67	1.38
10	292	13	200	15.38	1.28
11	101	10	150	15.00	1.25
12	318	17	254	14.94	1.24
13	260	1	13	13.00	1.08
14	148	12	147	12.25	1.02
	AVG	669	8,053	12.04	1.00
15	204	3	36	12.00	1.00
16	330	11	129	11.73	0.97
17	344	21	238	11.33	0.94
18	109	119	1,168	9.82	0.82
19	353	2	18	9.00	0.75
20	337	29	261	9.00	0.75
21	125	4	33	8.25	0.69
22	111	3	24	8.00	0.66
23	339	40	319	7.98	0.66
24	325	33	260	7.88	0.65
25	182	7	49	7.00	0.58
26	236	25	171	6.84	0.57
27	115	5	34	6.80	0.56
28	338	16	107	6.69	0.56
29	217	84	474	5.64	0.47
30	343	5	17	3.40	0.28
31	191	7	23	3.29	0.27
32	235	1	1	1.00	0.08
LOWEST	170	1	1	1.00	0.08

EXHIBIT 32C

DIRECT COSTS BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
HOURLY

EPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

EFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, ORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED. IRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION MPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.

NSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE OW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

VG DIRECT COST/OSHA RECORDABLE INJ

RIS SER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)
295	1	2,968	8.29
296	10	1,227	3.43
186	1	975	2.72
337	31	769	2.15
341	7	760	2.12
237	10	711	1.99
260	1	709	1.98
201	4	694	1.94
316	212	668	1.87
109	131	620	1.73
325	37	578	1.61
339	47	560	1.56
318	23	536	1.50
179	6	503	1.40
338	16	487	1.36
344	21	484	1.35
172	63	455	1.27
236	63	363	1.01
AVG	1,387	358	1.00
204	7	356	0.99
330	15	323	0.90
148	25	253	0.71
292	31	216	0.60
111	7	215	0.60
115	10	174	0.49
125	5	172	0.48
53	3	163	0.46
01	49	144	0.40
82	10	141	0.39
70	1	102	0.28
17	516	97	0.27

DIRECT COST PER MAN YEAR

IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
237	12,514	1,145.73	6.75
341	14,913	722.06	4.25
325	70,080	612.16	3.60
318	50,057	492.64	2.90
295	12,617	470.47	2.77
236	99,280	460.09	2.71
316	680,359	416.65	2.45
339	138,909	378.88	2.23
344	56,314	361.29	2.13
337	138,909	343.07	2.02
296	79,257	309.75	1.82
172	258,629	221.55	1.30
201	29,200	190.21	1.12
217	533,143	187.32	1.10
AVG	5,887,920	169.82	1.00
109	1,238,910	135.45	0.80
338	138,909	112.23	0.66
330	118,886	81.41	0.48
343	25,029	74.79	0.44
111	41,714	72.25	0.43
148	175,200	72.09	0.42
204	93,857	53.10	0.31
101	368,857	38.33	0.23
260	37,543	37.77	0.22
292	396,286	33.87	0.20
191	62,571	31.68	0.19
115	125,977	29.80	0.18
179	262,539	22.99	0.14
125	75,086	22.88	0.13
186	98,029	19.89	0.12
182	150,171	19.00	0.11

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                                                                    PAGE  2

AVG DIRECT COST/OSHA RECORDABLE INJ !       DIRECT COST PER  MAN YEAR
------------------------------------!----------------------------------------------
IRIS  NO. OSHA  AVG    AVG RATIO    ! IRIS    MAN-HRS     COSTS    AVG RATIO
USER   RECORD   COST (AVG COST/AVG) ! USER   EXPOSURE   PER M-Y (COSTS/AVG)
NO.     INJ                         !  NO.
                                    !
 191     11      90      0.25       !  353    67,160      14.59       0.09
 343     11      85      0.24       !  265     5,475       7.31       0.04
 235      1      83      0.23       !  235    27,114       6.12       0.04
 265      1      20      0.06       !  170    68,829       2.96       0.02
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EXHIBIT 33A

AVERAGE INJURY RATES BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
RESIDENTIAL COLLECTION

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE.
OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

OSHA INCIDENCE RATE					INCIDENCE RATE - LWC				SEVERITY RATE		
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATIO
217	390,029	464	238	4.03	341	31	154	4.40	341	2,431	6.35
149	46,929	52	222	3.75	149	30	128	3.64	326	2,048	5.35
341	40,150	37	184	3.12	103	65	125	3.57	296	1,473	3.85
103	103,816	95	183	3.10	325	19	112	3.21	149	1,462	3.82
236	70,080	58	166	2.80	221	127	96	2.72	358	1,229	3.21
328	3,911	3	153	2.60	191	58	94	2.67	359	1,171	3.06
299	90,998	66	145	2.45	359	6	84	2.38	221	1,160	3.03
111	255,500	160	125	2.12	344	20	80	2.28	103	1,110	2.90
354	33,789	21	124	2.10	111	89	70	1.99	316	1,083	2.83
152	66,506	40	120	2.04	171	104	69	1.97	179	969	2.53
211	33,371	20	120	2.03	348	21	68	1.93	344	939	2.45
191	123,891	74	119	2.02	244	11	66	1.88	191	785	2.05
325	33,789	20	118	2.00	211	11	66	1.88	111	769	2.01
343	18,771	11	117	1.98	236	23	66	1.87	348	762	1.99
359	14,352	8	111	1.89	265	88	64	1.83	362	751	1.96
221	265,929	128	96	1.63	152	21	63	1.80	325	716	1.87
244	33,371	16	96	1.62	316	124	60	1.71	152	695	1.82
316	413,388	188	91	1.54	339	40	58	1.64	265	673	1.76
157	68,829	31	90	1.52	183	94	56	1.59	171	599	1.56
183	337,886	147	87	1.47	235	24	56	1.58	235	561	1.46
265	274,480	119	87	1.47	181	87	53	1.52	197	538	1.41
171	300,343	125	83	1.41	343	5	53	1.52	181	510	1.33
344	50,057	20	80	1.35	157	18	52	1.49	172	480	1.26
348	61,946	23	74	1.26	328	1	51	1.46	339	459	1.20
172	708,882	262	74	1.25	296	7	48	1.37	211	402	1.05
179	295,650	108	73	1.24	179	68	46	1.31	354	385	1.01
235	86,349	30	69	1.18	170	296	46	1.30	AVG	383	1.00
181	325,372	111	68	1.15	299	20	44	1.25	340	381	1.00
339	138,909	47	68	1.15	337	29	42	1.19	333	378	0.99

OSHA INCIDENCE RATE

IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO
352	42,120	14	66	1.13
170	1,293,980	394	61	1.03
146	131,400	40	61	1.03
347	69,936	21	60	1.02
AVG	12,330,400	3643	59	1.00
350	49,431	14	57	0.96
333	39,107	11	56	0.95
161	112,524	29	52	0.87
275	59,130	15	51	0.86
346	79,257	20	50	0.85
101	200,229	50	50	0.85
296	29,200	7	48	0.81
362	73,209	17	46	0.79
337	138,909	31	45	0.76
204	22,943	5	44	0.74
133	58,975	12	41	0.69
326	15,330	3	39	0.66
186	244,029	46	38	0.64
197	77,276	14	36	0.61
295	28,389	5	35	0.60
349	101,679	17	33	0.57
358	24,403	4	33	0.55
182	258,107	42	33	0.55
226	60,069	9	30	0.51
363	80,160	12	30	0.51
260	321,461	46	29	0.48
355	29,200	4	27	0.46
330	56,314	7	25	0.42
338	138,909	16	23	0.39
109	1,032,430	116	22	0.38
340	383,250	40	21	0.35
261	10,011	1	20	0.34
331	32,850	3	18	0.31
292	328,917	29	18	0.30
323	91,667	8	17	0.30
115	309,259	26	17	0.28
283	75,086	5	13	0.23
113	21,535	1	9	0.16
272	136,093	6	9	0.15
178	614,869	18	6	0.10
242	56,314	1	4	0.06

INCIDENCE RATE - LWC

IRIS USER NO.	NO. INJ	RATE	AVG RATIO
326	3	39	1.12
217	76	39	1.11
362	14	38	1.09
350	9	36	1.04
354	6	36	1.01
AVG	2163	35	1.00
347	12	34	0.98
197	13	34	0.96
172	106	30	0.85
346	11	28	0.79
275	8	27	0.77
161	15	27	0.76
186	30	25	0.70
146	16	24	0.69
133	7	24	0.68
182	30	23	0.66
338	16	23	0.66
330	6	21	0.61
260	34	21	0.60
109	104	20	0.57
261	1	20	0.57
204	2	17	0.50
358	2	16	0.47
101	16	16	0.46
295	2	14	0.40
355	2	14	0.39
349	6	12	0.34
115	17	11	0.31
333	2	10	0.29
226	3	10	0.28
363	4	10	0.28
352	2	9	0.27
340	18	9	0.27
292	12	7	0.21
323	3	7	0.19
272	4	6	0.17
283	2	5	0.15
178	11	4	0.10
242	1	4	0.10

SEVERITY RATE

IRIS USER NO.	RATE	AVG RATIO
337	376	0.98
236	371	0.97
170	366	0.96
299	363	0.95
146	346	0.90
350	332	0.87
275	318	0.83
355	315	0.82
352	313	0.82
244	294	0.77
183	284	0.74
157	262	0.68
349	236	0.62
323	227	0.59
217	227	0.59
260	219	0.57
347	217	0.57
330	202	0.53
101	187	0.49
109	182	0.48
343	181	0.47
261	180	0.47
182	170	0.44
161	164	0.43
133	163	0.43
338	154	0.40
115	154	0.40
186	144	0.38
204	139	0.36
292	119	0.31
226	110	0.29
346	106	0.28
295	77	0.20
328	51	0.13
272	50	0.13
363	50	0.13
178	45	0.12
283	11	0.03
242	11	0.03

EXHIBIT 33B

AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
RESIDENTIAL COLLECTION

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE
HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO LOST WKDY CASES	DAYS LOST	AVG WKDYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	358	2	150	75.00	6.93
2	326	3	157	52.33	4.84
3	340	18	731	40.61	3.75
4	333	2	74	37.00	3.42
5	323	3	104	34.67	3.20
6	352	2	66	33.00	3.05
7	296	7	215	30.71	2.84
8	355	2	46	23.00	2.13
9	179	52	1,072	20.62	1.90
10	349	6	120	20.00	1.85
11	362	14	275	19.64	1.82
12	316	124	2,239	18.06	1.67
13	341	21	379	18.05	1.67
14	292	12	196	16.33	1.51
15	172	106	1,703	16.07	1.48
16	197	13	208	16.00	1.48
17	146	16	227	14.19	1.31
18	359	6	84	14.00	1.29
19	115	17	238	14.00	1.29
20	178	11	137	12.45	1.15
21	221	127	1,543	12.15	1.12
22	344	20	235	11.75	1.09
23	275	8	94	11.75	1.09
24	101	16	187	11.69	1.08
25	149	30	343	11.43	1.06
26	348	21	236	11.24	1.04
27	111	89	983	11.04	1.02
28	226	3	33	11.00	1.02
29	152	21	231	11.00	1.02
	AVG	2,133	23,084	10.82	1.00
30	265	88	923	10.49	0.97
31	260	34	352	10.35	0.96
32	235	24	242	10.08	0.93
33	181	87	830	9.54	0.88
34	330	6	57	9.50	0.88
35	350	9	82	9.11	0.84
36	109	104	940	9.04	0.84
37	337	29	261	9.00	0.83
38	261	1	9	9.00	0.83
39	103	65	576	8.86	0.82

RANK	IRIS USER NO.	NO LOST WKDY CASES	DAYS LOST	AVG WKDYS LOST	AVG RATIO (DAYS / AVG)
40	171	104	899	8.64	0.80
41	272	4	34	8.50	0.79
42	191	58	486	8.38	0.77
43	299	20	165	8.25	0.76
44	170	296	2,369	8.00	0.74
45	204	2	16	8.00	0.74
46	339	40	319	7.98	0.74
47	354	3	23	7.67	0.71
48	182	30	219	7.30	0.67
49	133	7	48	6.86	0.63
50	338	16	107	6.69	0.62
51	325	19	121	6.37	0.59
52	347	12	76	6.33	0.59
53	161	15	92	6.13	0.57
54	211	11	67	6.09	0.56
55	186	30	176	5.87	0.54
56	217	76	442	5.82	0.54
57	236	23	130	5.65	0.52
58	295	2	11	5.50	0.51
59	183	93	480	5.16	0.48
60	363	4	20	5.00	0.46
61	157	18	90	5.00	0.46
62	244	11	49	4.45	0.41
63	346	11	42	3.82	0.35
64	343	5	17	3.40	0.31
65	242	1	3	3.00	0.28
66	283	2	4	2.00	0.18
LOWEST	328	1	1	1.00	0.09

EXHIBIT 33C

DIRECT COSTS BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
RESIDENTIAL COLLECTION

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED. DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

AVG DIRECT COST/OSHA RECORDABLE INJ				DIRECT COST PER MAN YEAR			
IRIS USER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)	IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
326	3	11,385	33.41	326	15,330	4,455.84	22.05
296	7	1,653	4.85	341	40,150	1,477.26	7.31
358	4	1,001	2.94	103	103,816	1,002.25	4.96
261	1	960	2.82	296	29,200	792.67	3.92
362	17	940	2.76	149	46,929	749.99	3.71
341	37	800	2.35	316	413,388	577.98	2.86
337	31	769	2.26	221	265,929	553.76	2.74
355	4	768	2.26	111	255,500	512.30	2.54
340	40	688	2.02	325	33,789	485.08	2.40
316	188	635	1.86	236	70,080	439.35	2.17
109	116	578	1.70	362	73,209	436.48	2.16
221	128	571	1.68	152	66,506	414.58	2.05
339	47	560	1.64	344	50,057	400.82	1.98
103	95	542	1.59	339	138,909	378.88	1.88
235	30	528	1.55	179	295,650	374.11	1.85
179	108	512	1.50	235	86,349	366.98	1.82
197	14	510	1.50	337	138,909	343.07	1.70
344	20	502	1.47	348	61,946	334.39	1.66
338	16	487	1.43	358	24,403	327.99	1.62
348	23	450	1.32	191	123,891	325.74	1.61
323	8	411	1.21	171	300,343	274.89	1.36
111	160	409	1.20	181	325,372	269.32	1.33
325	20	407	1.19	359	14,352	263.94	1.31
181	111	395	1.16	265	274,480	257.49	1.27
115	26	371	1.09	211	33,371	256.63	1.27
146	40	370	1.09	354	33,789	249.61	1.24
152	40	344	1.01	217	390,029	237.57	1.18
AVG	3,643	341	1.00	146	131,400	225.48	1.12
149	52	338	0.99	244	33,371	216.65	1.07
171	125	330	0.97	355	29,200	210.55	1.04
330	7	319	0.94	172	708,882	208.58	1.03

AVG DIRECT COST/OSHA RECORDABLE INJ

IRIS USER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)
265	119	297	0.87
350	14	291	0.85
172	262	282	0.83
178	18	281	0.82
191	74	273	0.80
236	58	265	0.78
349	17	257	0.76
352	14	257	0.75
170	394	255	0.75
359	8	237	0.69
244	16	226	0.66
272	6	225	0.66
260	46	220	0.65
292	29	219	0.64
204	5	219	0.64
275	15	211	0.62
211	20	210	0.62
182	42	205	0.60
133	12	202	0.59
354	21	201	0.59
333	11	199	0.58
157	31	193	0.57
183	147	178	0.52
101	50	171	0.50
186	46	169	0.50
161	29	154	0.45
226	9	148	0.44
295	5	139	0.41
347	21	129	0.38
242	1	104	0.31
299	66	101	0.30
217	464	100	0.29
363	12	94	0.28
346	20	86	0.25
343	11	85	0.25
328	3	84	0.25
113	1	62	0.18
283	5	62	0.18
331	3	30	0.09

DIRECT COST PER MAN YEAR

IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG
AVG	12,330,400	202.04	1.00
261	10,011	191.78	0.95
197	77,276	184.77	0.91
157	68,829	173.85	0.86
352	42,120	170.61	0.84
350	49,431	165.00	0.82
170	1,293,980	155.21	0.77
183	337,886	154.51	0.76
299	90,998	147.08	0.73
340	383,250	143.54	0.71
109	1,032,430	134.83	0.67
328	3,911	128.37	0.64
338	138,909	112.23	0.56
333	39,107	111.80	0.55
275	59,130	107.19	0.53
343	18,771	99.73	0.49
204	22,943	95.28	0.47
349	101,679	86.04	0.43
101	200,229	85.22	0.42
133	58,975	82.34	0.41
330	56,314	79.34	0.39
161	112,524	79.15	0.39
347	69,936	77.33	0.38
323	91,667	73.31	0.36
182	258,107	66.92	0.33
115	309,259	64.24	0.32
186	244,029	63.71	0.32
260	321,461	63.07	0.31
295	28,389	48.82	0.24
226	60,069	44.48	0.22
346	79,257	43.40	0.21
292	328,917	38.68	0.19
363	80,160	28.14	0.14
272	136,093	19.82	0.10
178	614,869	16.43	0.08
283	75,086	8.20	0.04
113	21,535	5.76	0.03
331	32,850	5.48	0.03
242	56,314	3.69	0.02

EXHIBIT 34A

AVERAGE INJURY RATES BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
COMMERCIAL COLLECTION

EPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

EFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE.
SHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES /
AN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO
HE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR.
OES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL
REATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
EVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000.
OUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME
MPLOYEES PER YEAR.

NSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE
OW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

OSHA INCIDENCE RATE

RIS SER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO
210	6,570	6	183	8.47
325	19,606	14	143	6.63
299	4,171	2	96	4.45
211	33,371	13	78	3.61
149	2,607	1	77	3.56
329	7,978	3	75	3.49
341	11,784	4	68	3.15
355	20,857	7	67	3.11
358	6,779	2	59	2.74
207	58,400	15	51	2.38
328	4,171	1	48	2.22
125	8,343	2	48	2.22
191	10,011	2	40	1.85
236	10,429	2	38	1.78
101	27,114	5	37	1.71
260	106,371	19	36	1.66
146	112,629	18	32	1.48
336	52,873	8	30	1.40
113	22,421	3	27	1.24
133	29,965	4	27	1.24
363	8,350	1	24	1.11
197	34,675	4	23	1.07
AVG	1,521,670	164	22	1.00
186	18,771	2	21	0.99
115	67,577	7	21	0.96
359	11,395	1	18	0.81
183	23,881	2	17	0.78
244	12,514	1	16	0.74
35	13,766	1	15	0.67

INCIDENCE RATE - LWC

IRIS USER NO.	NO. INJ	RATE	AVG RATIO
210	4	122	9.17
325	11	112	8.45
149	1	77	5.78
341	4	68	5.11
211	9	54	4.06
328	1	48	3.61
125	2	48	3.61
207	9	31	2.32
358	1	30	2.22
133	4	27	2.01
329	1	25	1.89
146	13	23	1.74
197	4	23	1.74
260	12	23	1.70
101	3	22	1.67
355	2	19	1.44
236	1	19	1.44
336	5	19	1.42
244	1	16	1.20
AVG	101	13	1.00
296	2	10	0.72
113	1	9	0.67
115	3	9	0.67
283	1	9	0.66
183	1	8	0.63
204	1	4	0.29
316	3	3	0.24
292	1	3	0.22

SEVERITY RATE

IRIS USER NO.	RATE	AVG RATIO
244	3,308	12.19
210	2,283	8.41
197	2,169	7.99
325	1,357	5.00
328	1,199	4.42
133	1,081	3.98
236	767	2.83
260	596	2.20
146	574	2.11
101	391	1.44
125	360	1.32
341	339	1.25
211	306	1.13
207	291	1.07
AVG	271	1.00
149	230	0.85
113	214	0.79
358	89	0.33
115	77	0.28
204	77	0.28
316	72	0.26
336	49	0.18
355	48	0.18
296	38	0.14
283	35	0.13
183	25	0.09
329	25	0.09
292	12	0.04

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     OSHA INCIDENCE RATE                INCIDENCE RATE - LWC      SEVERITY RATE
IRIS MAN-HOURS   NO. RATE  AVG          IRIS  NO. RATE   AVG     IRIS  RATE  AVG
USER  EXPOSURE   INJ       RATIO        USER  INJ        RATIO   USER        RATIO
NO.                                      NO.                      NO.
 296    41,714     3   14  0.67
 330    18,771     1   11  0.49
 326    21,274     1    9  0.44
 283    22,943     1    9  0.40
 292    67,369     2    6  0.28
 204    52,143     1    4  0.18
 316   191,886     3    3  0.15
 178   176,660     2    2  0.11
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EXHIBIT 34B

AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
COMMERCIAL COLLECTION

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE
HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO LOST WKDY CASES	DAYS LOST	AVG WKDYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	244	1	207	207.00	10.12
2	197	4	376	94.00	4.60
3	133	4	162	40.50	1.98
4	236	1	40	40.00	1.96
5	260	12	317	26.42	1.29
6	328	1	25	25.00	1.22
7	146	13	323	24.85	1.22
8	113	1	24	24.00	1.17
9	316	3	69	23.00	1.12
	AVG	101	2,065	20.45	1.00
10	204	1	20	20.00	0.98
11	210	4	75	18.75	0.92
12	101	3	53	17.67	0.86
13	325	11	133	12.09	0.59
14	207	9	85	9.44	0.46
15	115	3	26	8.67	0.42
16	125	2	15	7.50	0.37
17	211	9	51	5.67	0.28
18	341	4	20	5.00	0.24
19	296	2	8	4.00	0.20
20	292	1	4	4.00	0.20
21	283	1	4	4.00	0.20
22	358	1	3	3.00	0.15
23	183	1	3	3.00	0.15
24	149	1	3	3.00	0.15
25	336	5	13	2.60	0.13
26	355	2	5	2.50	0.12
LOWEST	329	1	1	1.00	0.05

EXHIBIT 34C

DIRECT COSTS BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
COMMERCIAL COLLECTION

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED. DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

AVG DIRECT COST/OSHA RECORDABLE INJ				DIRECT COST PER MAN YEAR			
IRIS USER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)	IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
197	4	22,292	19.01	197	34,675	5,143.13	20.33
244	1	14,907	12.71	244	12,514	2,382.40	9.42
236	2	3,612	3.08	210	6,570	1,818.26	7.19
133	4	2,267	1.93	236	10,429	1,385.42	5.48
204	1	1,263	1.08	325	19,606	1,186.29	4.69
316	3	1,230	1.05	133	29,965	605.38	2.39
AVG	164	1,173	1.00	146	112,629	368.88	1.46
146	18	1,154	0.98	260	106,371	257.32	1.02
210	6	995	0.85	AVG	1,521,670	252.96	1.00
325	14	831	0.71	125	8,343	248.84	0.98
260	19	720	0.61	341	11,784	241.85	0.96
125	2	519	0.44	328	4,171	219.59	0.87
328	1	458	0.39	211	33,371	157.92	0.62
113	3	442	0.38	358	6,779	133.95	0.53
341	4	356	0.30	101	27,114	127.09	0.50
101	5	345	0.29	113	22,421	118.28	0.47
296	3	234	0.20	149	2,607	100.49	0.40
358	2	227	0.19	207	58,400	71.40	0.28
115	7	201	0.17	299	4,171	58.01	0.23
211	13	199	0.17	329	7,978	49.64	0.20
283	1	177	0.15	204	52,143	48.44	0.19
292	2	174	0.15	115	67,577	43.77	0.17
207	15	139	0.12	316	191,886	38.46	0.15
149	1	131	0.11	296	41,714	33.66	0.13
183	2	80	0.07	283	22,943	15.43	0.06
329	3	66	0.06	355	20,857	14.38	0.06
299	2	60	0.05	183	23,881	13.40	0.05
363	1	53	0.05	363	8,350	12.69	0.05
330	1	40	0.03	292	67,369	10.36	0.04
359	1	34	0.03	191	10,011	7.99	0.03
186	2	27	0.02	336	52,873	6.05	0.02

AVG DIRECT COST/OSHA RECORDABLE INJ

IRIS USER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)
178	2	25	0.02
235	1	25	0.02
355	7	21	0.02
336	8	20	0.02
191	2	20	0.02
326	1	4	0.00

DIRECT COST PER MAN YEAR

IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
359	11,395	5.97	0.02
186	18,771	5.86	0.02
330	18,771	4.26	0.02
235	13,766	3.63	0.01
178	176,660	0.58	0.00
326	21,274	0.38	0.00

EXHIBIT 35A

AVERAGE INJURY RATES BY "IRIS" USERS RANKED FROM HIGHEST TO LOWEST

BRUSH

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE.
OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

OSHA INCIDENCE RATE					INCIDENCE RATE - LWC				SEVERITY RATE		
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATIO
341	6,257	3	96	3.41	341	2	64	5.24	172	449	2.71
146	20,075	7	70	2.48	242	1	48	3.93	341	384	2.32
172	258,629	63	49	1.73	146	3	30	2.45	242	192	1.16
242	4,171	1	48	1.71	172	30	23	1.90	146	169	1.02
101	208,571	44	42	1.50	AVG	66	12	1.00	AVG	166	1.00
236	18,771	3	32	1.14	179	3	11	0.90	101	93	0.56
AVG	1,081,820	152	28	1.00	125	4	11	0.87	125	88	0.53
179	54,750	4	15	0.52	236	1	11	0.87	170	81	0.49
125	75,086	5	13	0.47	170	15	9	0.76	179	73	0.44
170	323,494	21	13	0.46	101	7	7	0.55	236	11	0.06
204	18,771	1	11	0.38							

EXHIBIT 35B

AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
BRUSH

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO LOST WKDY CASES	DAYS LOST	AVG WKDYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	172	30	581	19.37	1.41
2	101	7	97	13.86	1.01
	AVG	65	890	13.69	1.00
3	170	15	131	8.73	0.64
4	125	4	33	8.25	0.60
5	179	2	14	7.00	0.51
6	341	2	12	6.00	0.44
7	146	3	17	5.67	0.41
8	242	1	4	4.00	0.29
LOWEST	236	1	1	1.00	0.07

EXHIBIT 35C

DIRECT COSTS BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
BRUSH

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED. DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

AVG DIRECT COST/OSHA RECORDABLE INJ

IRIS USER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)
341	3	485	1.69
172	63	455	1.59
AVG	152	287	1.00
170	21	263	0.92
242	1	174	0.61
125	5	172	0.60
179	4	166	0.58
204	1	136	0.47
101	44	121	0.42
146	7	78	0.27
236	3	73	0.26

DIRECT COST PER MAN YEAR

IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG
341	6,257	464.75	5.76
172	258,629	221.55	2.75
242	4,171	83.42	1.03
AVG	1,081,820	80.66	1.00
146	20,075	54.60	0.68
101	208,571	51.26	0.64
170	323,494	34.10	0.42
179	54,750	24.33	0.30
236	18,771	23.44	0.29
125	75,086	22.88	0.28
204	18,771	14.49	0.18

EXHIBIT 36A

AVERAGE INJURY RATES BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
DEAD ANIMAL COLLECTION

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE.
OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

OSHA INCIDENCE RATE					INCIDENCE RATE - LWC				SEVERITY RATE		
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATIO
221	2,086	2	192	5.48	221	2	192	8.22	221	1,151	6.47
170	13,349	4	60	1.71	235	1	48	2.06	170	539	3.03
235	4,171	1	48	1.37	170	3	45	1.93	235	432	2.43
217	8,343	2	48	1.37	182	1	40	1.71	AVG	178	1.00
182	5,006	1	40	1.14	111	1	32	1.37	182	80	0.45
AVG	68,620	12	35	1.00	AVG	8	23	1.00	111	64	0.36
111	6,257	1	32	0.91							
172	7,300	1	27	0.78							

EXHIBIT 36B

AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
DEAD ANIMAL COLLECTION

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE
HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO LOST WKDY CASES	DAYS LOST	AVG WKDYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	170	3	36	12.00	1.57
2	235	1	9	9.00	1.18
	AVG	8	61	7.62	1.00
3	221	2	12	6.00	0.79
4	182	1	2	2.00	0.26
LOWEST	111	1	2	2.00	0.26

EXHIBIT 36C

DIRECT COSTS BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
DEAD ANIMAL COLLECTION

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED. DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

AVG DIRECT COST/OSHA RECORDABLE INJ				DIRECT COST PER MAN YEAR			
IRIS USER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)	IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
170	4	361	1.54	221	2,086	643.42	7.83
235	1	345	1.47	170	13,349	216.35	2.63
221	2	335	1.43	235	4,171	165.41	2.01
AVG	12	235	1.00	AVG	68,620	82.22	1.00
111	1	172	0.73	111	6,257	54.98	0.67
182	1	85	0.36	182	5,006	33.96	0.41
217	2	42	0.18	217	8,343	20.14	0.24
172	1	20	0.09	172	7,300	5.48	0.07

EXHIBIT 37A

AVERAGE INJURY RATES BY 'IRIS' USERS RANKED FROM HIGHEST TO LOWEST PAPER COLLECTION

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE.
OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

OSHA INCIDENCE RATE				
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO
111	23,725	8	67	3.02
299	4,171	1	48	2.15
265	5,475	1	37	1.64
AVG	89,581	10	22	1.00

INCIDENCE RATE - LWC			
IRIS USER NO.	NO. INJ	RATE	AVG RATIO
111	8	67	3.78
AVG	8	18	1.00

SEVERITY RATE		
IRIS USER NO.	RATE	AVG RATIO
111	1,458	3.78
AVG	386	1.00

EXHIBIT 37B

AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
PAPER COLLECTION

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO LOST WKDY CASES	DAYS LOST	AVG WKDYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	111	8	173	21.62	1.00

EXHIBIT 37C

DIRECT COSTS BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
PAPER COLLECTION

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED. DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

AVG DIRECT COST/OSHA RECORDABLE INJ				DIRECT COST PER MAN YEAR			
IRIS USER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)	IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG
111	8	871	1.24	111	23,725	587.14	3.75
AVG	10	700	1.00	AVG	89,581	156.39	1.00
299	1	20	0.03	299	4,171	9.59	0.06
265	1	20	0.03	265	5,475	7.31	0.05

EXHIBIT 38A

AVERAGE INJURY RATES BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
BULKY WASTE

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE.
OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

OSHA INCIDENCE RATE				
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO
341	834	2	479	15.41
221	3,963	3	151	4.87
146	2,920	2	137	4.40
149	1,669	1	120	3.85
362	2,346	1	85	2.74
171	101,679	40	79	2.53
299	10,311	4	78	2.49
179	18,771	6	64	2.05
197	3,285	1	61	1.96
181	9,386	2	43	1.37
191	62,571	11	35	1.13
186	6,257	1	32	1.03
AVG	475,584	74	31	1.00

INCIDENCE RATE - LWC			
IRIS USER NO.	NO. INJ	RATE	AVG RATIO
341	2	479	26.51
221	3	151	8.37
149	1	120	6.63
197	1	61	3.37
181	2	43	2.36
171	21	41	2.28
299	2	39	2.15
179	3	32	1.77
186	1	32	1.77
191	7	22	1.24
AVG	43	18	1.00

SEVERITY RATE		
IRIS USER NO.	RATE	AVG RATIO
221	5,753	23.51
341	3,596	14.69
149	2,277	9.30
299	1,474	6.02
179	1,374	5.62
181	511	2.09
171	350	1.43
AVG	245	1.00
197	122	0.50
191	74	0.30
186	64	0.26

EXHIBIT 38B

AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
BULKY WASTE

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE
HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO LOST WKDY CASES	DAYS LOST	AVG WKDYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	179	2	112	56.00	4.07
2	299	2	76	38.00	2.76
3	221	3	114	38.00	2.76
4	149	1	19	19.00	1.38
5	341	1	14	14.00	1.02
	AVG	41	564	13.76	1.00
6	181	2	24	12.00	0.87
7	171	21	178	8.48	0.62
8	191	7	23	3.29	0.24
9	197	1	2	2.00	0.15
LOWEST	186	1	2	2.00	0.15

EXHIBIT 38C

DIRECT COSTS BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
BULKY WASTE

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED. DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

AVG DIRECT COST/OSHA RECORDABLE INJ				DIRECT COST PER MAN YEAR			
IRIS USER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)	IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
221	3	1,809	6.33	221	3,963	2,739.44	30.78
149	1	718	2.51	341	834	1,944.18	21.84
181	2	594	2.08	149	1,669	860.62	9.67
179	6	503	1.76	179	18,771	321.55	3.61
341	2	405	1.42	299	10,311	309.17	3.47
299	4	398	1.39	181	9,386	253.36	2.85
AVG	74	286	1.00	171	101,679	139.70	1.57
171	40	178	0.62	AVG	475,584	89.01	1.00
197	1	144	0.50	197	3,285	87.67	0.98
191	11	90	0.32	146	2,920	40.41	0.45
186	1	77	0.27	191	62,571	31.68	0.36
146	2	29	0.10	186	6,257	24.61	0.28
362	1	20	0.07	362	2,346	17.05	0.19

EXHIBIT 39A

AVERAGE INJURY RATES BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
STREET CLEANING

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE.
OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

OSHA INCIDENCE RATE					INCIDENCE RATE - LWC				SEVERITY RATE		
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATIO
125	4,171	7	336	47.36	125	5	240	49.85	125	3,404	59.25
341	6,257	1	32	4.51	341	1	32	6.65	341	1,055	18.36
182	90,103	9	20	2.82	235	1	16	3.32	295	476	8.28
235	12,514	1	16	2.26	295	1	16	3.30	182	104	1.82
295	12,617	1	16	2.24	182	6	13	2.77	260	104	1.81
260	25,029	1	8	1.13	260	1	8	1.66	AVG	57	1.00
AVG	790,170	28	7	1.00	AVG	19	5	1.00	179	25	0.43
178	185,055	4	4	0.61	170	1	4	0.77	235	16	0.28
170	54,229	1	4	0.52	179	2	2	0.34	170	4	0.06
179	243,768	3	2	0.35	178	1	1	0.22	178	1	0.02

EXHIBIT 39B

AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
STREET CLEANING

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO LOST WKDY CASES	DAYS LOST	AVG WKDYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	341	1	33	33.00	2.76
2	295	1	30	30.00	2.51
3	179	2	30	15.00	1.26
4	125	5	71	14.20	1.19
5	260	1	13	13.00	1.09
	AVG	19	227	11.95	1.00
6	182	6	47	7.83	0.66
7	235	1	1	1.00	0.08
8	178	1	1	1.00	0.08
LOWEST	170	1	1	1.00	0.08

EXHIBIT 39C

DIRECT COSTS BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
STREET CLEANING

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED. DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

AVG DIRECT COST/OSHA RECORDABLE INJ				DIRECT COST PER MAN YEAR			
IRIS USER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)	IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
295	1	2,968	8.14	125	4,171	1,193.84	45.82
341	1	1,257	3.45	295	12,617	470.47	18.06
260	1	709	1.94	341	6,257	422.88	16.23
179	3	382	1.05	260	25,029	56.66	2.17
AVG	28	365	1.00	182	90,103	29.79	1.14
125	7	356	0.98	AVG	790,170	26.05	1.00
182	9	147	0.40	235	12,514	13.26	0.51
170	1	102	0.28	179	243,768	9.41	0.36
235	1	83	0.23	170	54,229	3.76	0.14
178	4	32	0.09	178	185,055	1.39	0.05

EXHIBIT 40A

AVERAGE INJURY RATES BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
LITTER CREW

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE. OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES. SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

OSHA INCIDENCE RATE					INCIDENCE RATE - LWC				SEVERITY RATE		
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATIO
111	29,200	6	41	1.00	111	2	14	1.00	111	151	1.00
111	29,200	6	0	1.00	111	2	0	1.00			

EXHIBIT 40B

AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
LITTER CREW

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE
HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO LOST WKDY CASES	DAYS LOST	AVG WKDYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	111	2	22	11.00	1.00

EXHIBIT 40C

DIRECT COSTS BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
LITTER CREW

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED. DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

AVG DIRECT COST/OSHA RECORDABLE INJ				DIRECT COST PER MAN YEAR			
IRIS USER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)	IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
111	6	222	1.00	111	29,200	91.44	1.00
AVG	6	222	1.00	AVG	29,200	91.44	1.00

EXHIBIT 41A

AVERAGE INJURY RATES BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
RESIDENTIAL AND COMMERCIAL COMBINED

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE.
OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

OSHA INCIDENCE RATE				
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO
351	3,233	6	371	7.53
210	11,732	9	153	3.11
344	2,086	1	96	1.95
318	50,057	23	92	1.86
350	15,434	7	91	1.84
207	220,564	97	88	1.78
125	525,600	169	64	1.30
324	20,075	5	50	1.01
AVG	1,663,970	410	49	1.00
237	193,189	39	40	0.82
330	37,543	7	37	0.76
325	16,686	3	36	0.73
148	175,200	25	29	0.58
201	92,814	11	24	0.48
353	31,286	3	19	0.39
355	66,743	4	12	0.24
340	19,554	1	10	0.21

INCIDENCE RATE - LWC			
IRIS USER NO.	NO. INJ	RATE	AVG RATIO
351	3	186	5.53
210	8	136	4.07
344	1	96	2.86
318	17	68	2.03
350	5	65	1.93
125	145	55	1.65
207	44	40	1.19
325	3	36	1.07
AVG	279	34	1.00
324	3	30	0.89
330	5	27	0.79
237	22	23	0.68
148	12	14	0.41
353	2	13	0.38
355	4	12	0.36
201	5	11	0.32

SEVERITY RATE		
IRIS USER NO.	RATE	AVG RATIO
350	2,281	5.22
210	1,722	3.94
318	1,015	2.32
351	866	1.98
125	784	1.79
AVG	437	1.00
207	403	0.92
324	399	0.91
330	384	0.88
344	288	0.66
237	206	0.47
201	185	0.42
148	168	0.38
353	115	0.26
325	72	0.16
355	54	0.12

EXHIBIT 41B

AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
RESIDENTIAL AND COMMERCIAL COMBINED

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO LOST WKDY CASES	DAYS LOST	AVG WKDYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	350	5	176	35.20	2.70
2	201	5	86	17.20	1.32
3	318	17	254	14.94	1.15
4	330	5	72	14.40	1.10
5	125	145	2,060	14.21	1.09
6	324	3	40	13.33	1.02
	AVG	279	3,638	13.04	1.00
7	210	8	101	12.62	0.97
8	148	12	147	12.25	0.94
9	207	44	444	10.09	0.77
10	237	22	199	9.05	0.69
11	353	2	18	9.00	0.69
12	351	3	14	4.67	0.36
13	355	4	18	4.50	0.35
14	344	1	3	3.00	0.23
LOWEST	325	3	6	2.00	0.15

EXHIBIT 41C

DIRECT COSTS BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
RESIDENTIAL AND COMMERCIAL COMBINED

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED. DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

AVG DIRECT COST/OSHA RECORDABLE INJ

IRIS USER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)
350	7	975	2.72
210	9	664	1.85
325	3	542	1.51
318	23	536	1.49
125	169	440	1.23
237	39	384	1.07
330	7	366	1.02
AVG	410	359	1.00
324	5	253	0.70
148	25	253	0.70
355	4	206	0.57
201	11	189	0.53
207	97	168	0.47
353	3	163	0.46
351	6	151	0.42
344	1	141	0.39
340	1	55	0.15

DIRECT COST PER MAN YEAR

IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG
210	11,732	1,019.08	5.75
350	15,434	884.26	4.99
351	3,233	559.26	3.16
318	50,057	492.64	2.78
125	525,600	282.97	1.60
325	16,686	194.90	1.10
AVG	1,663,970	177.08	1.00
237	193,189	157.29	0.89
207	220,564	148.11	0.84
330	37,543	136.64	0.77
344	2,086	135.21	0.76
324	20,075	130.81	0.74
148	175,200	72.09	0.41
201	92,814	44.69	0.25
353	31,286	31.32	0.18
355	66,743	24.69	0.14
340	19,554	5.63	0.03

EXHIBIT 42A

AVERAGE INJURY RATES BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
MANUAL SWEEPER CREW

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE. OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES. SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS. A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50. A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

OSHA INCIDENCE RATE					INCIDENCE RATE - LWC				SEVERITY RATE		
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATIO
125	8,864	12	271	19.02	125	11	248	21.11	341	5,920	28.22
341	2,399	3	250	17.58	341	2	167	14.19	125	3,587	17.10
201	20,857	4	38	2.70	201	2	19	1.63	201	633	3.02
109	37,543	3	16	1.12	109	3	16	1.36	AVG	210	1.00
AVG	323,232	23	14	1.00	AVG	19	12	1.00	186	99	0.47
186	68,829	1	3	0.20	186	1	3	0.25	109	48	0.23

EXHIBIT 42B

AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
MANUAL SWEEPER CREW

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE
HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO LOST WKDY CASES	DAYS LOST	AVG WKDYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	341	2	71	35.50	1.99
2	186	1	34	34.00	1.91
3	201	2	66	33.00	1.85
	AVG	19	339	17.84	1.00
4	125	11	159	14.45	0.81
LOWEST	109	3	9	3.00	0.17

EXHIBIT 42C

DIRECT COSTS BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
MANUAL SWEEPER CREW

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED. DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

AVG DIRECT COST/OSHA RECORDABLE INJ				DIRECT COST PER MAN YEAR			
IRIS USER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)	IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
186	1	975	1.99	341	2,399	2,173.79	31.11
341	3	869	1.78	125	8,864	979.66	14.02
201	4	694	1.42	201	20,857	266.29	3.81
AVG	23	489	1.00	AVG	323,232	69.88	1.00
125	12	359	0.73	109	37,543	31.59	0.45
109	3	198	0.40	186	68,829	28.33	0.41

EXHIBIT 43A

AVERAGE INJURY RATES BY 'IRIS' USERS RANKED FROM HIGHEST TO LOWEST

LITTER CAN PICK-UP CREW

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE.
OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

OSHA INCIDENCE RATE					INCIDENCE RATE - LWC				SEVERITY RATE		
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATIO
244	4,171	3	144	1.00	244	2	96	1.00	244	479	1.00
244	4,171	3	0	1.00	244	2	0	1.00			

EXHIBIT 43B

AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
LITTER CAN PICKUP CREW

EPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

NSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE
OW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO LOST WKDY CASES	DAYS LOST	AVG WKDYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	244	2	10	5.00	1.00

EXHIBIT 43C

DIRECT COSTS BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
LITTER CAN PICKUP CREW

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED. DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

AVG DIRECT COST/OSHA RECORDABLE INJ				DIRECT COST PER MAN YEAR			
IRIS USER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)	IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
244	3	277	1.00	244	4,171	398.90	1.00
AVG	3	277	1.00	AVG	4,171	398.90	1.00

EXHIBIT 44A

AVERAGE INJURY RATES BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
BRUSH AND BULKY WASTE CREW

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE. OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES. SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

OSHA INCIDENCE RATE					INCIDENCE RATE - LWC				SEVERITY RATE		
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATIO
115	2,086	3	288	4.06	115	2	192	5.60	363	3,713	6.88
363	1,670	1	120	1.69	363	1	120	3.50	109	1,551	2.88
217	101,400	50	99	1.39	109	12	85	2.48	316	1,422	2.64
109	28,234	12	85	1.20	316	17	68	1.98	115	767	1.42
316	50,057	21	84	1.18	AVG	44	34	1.00	AVG	539	1.00
AVG	256,969	91	71	1.00	178	4	18	0.53	178	215	0.40
178	43,800	4	18	0.26	217	8	16	0.46	217	63	0.12

EXHIBIT 44B

AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
BRUSH AND BULKY WASTE COLLECTION

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO LOST WKDY CASES	DAYS LOST	AVG WKDYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	363	1	31	31.00	1.97
2	316	17	356	20.94	1.33
3	109	12	219	18.25	1.16
	AVG	44	693	15.75	1.00
4	178	4	47	11.75	0.75
5	217	8	32	4.00	0.25
LOWEST	115	2	8	4.00	0.25

EXHIBIT 44C

DIRECT COSTS BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
BRUSH AND BULKY WASTE COLLECTION

EPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

EFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, ORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED. IRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION MPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.

NSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE OW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

VG DIRECT COST/OSHA RECORDABLE INJ				DIRECT COST PER MAN YEAR			
RIS SER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)	IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
109	12	1,126	2.65	363	1,670	1,273.05	4.21
363	1	1,063	2.50	109	28,234	971.23	3.21
316	21	885	2.08	316	50,057	742.39	2.46
AVG	91	425	1.00	115	2,086	321.23	1.06
178	4	408	0.96	AVG	256,969	302.30	1.00
115	3	112	0.26	178	43,800	74.47	0.25
217	50	70	0.17	217	101,400	69.43	0.23

EXHIBIT 45A

AVERAGE INJURY RATES BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
BKYD W/O INT CONT

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE. OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES. SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

OSHA INCIDENCE RATE					INCIDENCE RATE - LWC				SEVERITY RATE		
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATIO
181	325,372	111	68	1.05	181	87	53	1.13	181	510	1.06
AVG	376,107	122	65	1.00	AVG	89	47	1.00	AVG	481	1.00
333	39,107	11	56	0.87	333	2	10	0.22	333	378	0.79

EXHIBIT 45B

AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
BKYD W/O INT CONT

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE
HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO LOST WKDY CASES	DAYS LOST	AVG WKDYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	333	2	74	37.00	3.64
	AVG	89	904	10.16	1.00
LOWEST	181	87	830	9.54	0.94

EXHIBIT 45C

DIRECT COSTS BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
BKYD W/O INT CONT

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED. DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

AVG DIRECT COST/OSHA RECORDABLE INJ				DIRECT COST PER MAN YEAR			
IRIS USER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)	IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
181	111	395	1.05	181	325,372	269.32	1.10
AVG	122	377	1.00	AVG	376,107	244.61	1.00
333	11	199	0.53	333	39,107	111.80	0.46

EXHIBIT 46A

AVERAGE INJURY RATES BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
BKYD W TUB

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE.
OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES /
MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO
THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR.
DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL
TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME
EMPLOYEES PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE
HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

OSHA INCIDENCE RATE					INCIDENCE RATE - LWC				SEVERITY RATE		
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATIO
103	98,550	92	187	2.38	103	63	128	2.67	103	1,130	2.61
354	33,789	21	124	1.58	AVG	69	48	1.00	AVG	432	1.00
AVG	287,724	113	79	1.00	354	6	36	0.74	354	385	0.89

EXHIBIT 46B

AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
BKYD W TUB

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO LOST WKDY CASES	DAYS LOST	AVG WKDYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	103	63	557	8.84	1.01
	AVG	66	580	8.79	1.00
LOWEST	354	3	23	7.67	0.87

EXHIBIT 46C

DIRECT COSTS BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
BKYD W TUB

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED. DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

AVG DIRECT COST/OSHA RECORDABLE INJ			
IRIS USER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)
103	92	541	1.13
AVG	113	478	1.00
354	21	201	0.42

DIRECT COST PER MAN YEAR			
IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
103	98,550	1,020.88	2.69
AVG	287,724	378.98	1.00
354	33,789	249.61	0.66

EXHIBIT 47A

AVERAGE INJURY RATES BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
BKYD W WHEELED CART

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE.
OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

OSHA INCIDENCE RATE					INCIDENCE RATE - LWC				SEVERITY RATE		
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATIO
170	1,293,980	394	61	1.03	170	296	46	1.05	170	366	1.05
AVG	1,374,140	406	59	1.00	AVG	300	44	1.00	AVG	348	1.00
363	80,160	12	30	0.51	363	4	10	0.23	363	50	0.14

EXHIBIT 47B

AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
BKYD W WHEELED CART

EPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

NSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE
OW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO LOST WKDY CASES	DAYS LOST	AVG WKDYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	170	296	2,369	8.00	1.01
	AVG	300	2,389	7.96	1.00
LOWEST	363	4	20	5.00	0.63

EXHIBIT 47C

DIRECT COSTS BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
BKYD W WHEELED CART

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED. DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

AVG DIRECT COST/OSHA RECORDABLE INJ				DIRECT COST PER MAN YEAR			
IRIS USER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)	IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
170	394	255	1.02	170	1,293,980	155.21	1.05
AVG	406	250	1.00	AVG	1,374,140	147.80	1.00
363	12	94	0.38	363	80,160	28.14	0.19

EXHIBIT 48A

AVERAGE INJURY RATES BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
CURBSIDE

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE.
OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

OSHA INCIDENCE RATE					INCIDENCE RATE - LWC				SEVERITY RATE		
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATIO
346	12,514	19	304	5.77	346	10	160	4.42	210	1,543	3.51
149	50,422	53	210	3.99	149	31	123	3.40	149	1,436	3.27
328	3,911	3	153	2.91	210	8	122	3.38	316	1,264	2.88
244	4,171	3	144	2.73	221	130	96	2.66	221	1,228	2.79
210	13,088	9	138	2.61	244	2	96	2.65	359	1,171	2.66
236	88,852	61	137	2.61	359	6	84	2.31	326	1,087	2.47
299	105,481	69	131	2.48	103	2	76	2.10	179	857	1.95
152	66,506	40	120	2.28	191	65	70	1.93	111	825	1.88
211	33,371	20	120	2.28	111	96	69	1.90	362	728	1.66
111	279,225	167	120	2.27	211	11	66	1.82	103	722	1.64
343	18,771	11	117	2.23	152	21	63	1.75	125	697	1.59
103	5,266	3	114	2.16	316	17	60	1.67	152	695	1.58
359	14,352	8	111	2.12	339	40	58	1.59	346	655	1.49
221	269,891	131	97	1.84	236	24	54	1.49	191	546	1.24
191	186,463	85	91	1.73	343	5	53	1.47	197	521	1.19
316	56,314	23	82	1.55	328	1	51	1.41	181	511	1.16
339	138,909	47	68	1.29	125	149	50	1.37	244	479	1.09
179	369,171	118	64	1.21	242	1	48	1.33	339	459	1.05
125	600,686	174	58	1.10	181	2	43	1.18	AVG	439	1.00
AVG	5,070,610	1335	53	1.00	337	29	42	1.15	211	402	0.91
275	59,130	15	51	0.96	179	74	40	1.11	337	376	0.86
242	4,171	1	48	0.91	299	21	40	1.10	299	353	0.80
362	75,555	18	48	0.90	362	14	37	1.02	275	318	0.72
337	138,909	31	45	0.85	AVG	917	36	1.00	355	315	0.72
181	9,386	2	43	0.81	197	14	35	0.96	236	295	0.67
186	250,286	47	38	0.71	275	8	27	0.75	323	216	0.49
197	80,561	15	37	0.71	186	31	25	0.68	242	192	0.44
265	5,475	1	37	0.69	182	30	23	0.64	343	181	0.41
182	258,107	42	33	0.62	338	16	23	0.64	182	170	0.39

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        OSHA INCIDENCE RATE                  INCIDENCE RATE - LWC          SEVERITY RATE
 IRIS MAN-HOURS   NO. RATE  AVG          IRIS   NO. RATE     AVG        IRIS   RATE   AVG
 USER  EXPOSURE   INJ       RATIO        USER   INJ          RATIO      USER          RATIO
  NO.                                     NO.                            NO.
  226    60,069     9   30  0.57          326     3    21     0.57       148    168   0.38
  148   175,200    25   29  0.54          355     2    14     0.38       338    154   0.35
  355    29,200     4   27  0.52          148    12    14     0.38       186    142   0.32
  235     7,509     1   27  0.51          353     2    13     0.35       353    115   0.26
  338   138,909    16   23  0.44          226     3    10     0.28       226    110   0.25
  161    27,114     3   22  0.42          170    15     9     0.26       170     81   0.18
  326    28,887     3   21  0.39          161     1     7     0.20       161     59   0.13
  353    31,286     3   19  0.36          323     3     6     0.17       178     59   0.13
  323    96,360     8   17  0.32          272     4     6     0.16       328     51   0.12
  170   323,494    21   13  0.25          178    14     5     0.13       272     48   0.11
  272   140,786     6    9  0.16
  113    25,498     1    8  0.15
  178   583,479    19    7  0.12
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EXHIBIT 48B

AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
CURBSIDE

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO LOST WKDY CASES	DAYS LOST	AVG WKDYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	326	3	157	52.33	4.37
2	323	3	104	34.67	2.90
3	355	2	46	23.00	1.92
4	179	56	1,198	21.39	1.79
5	316	17	356	20.94	1.75
6	362	14	275	19.64	1.64
7	197	14	210	15.00	1.25
8	125	149	2,093	14.05	1.17
9	359	6	84	14.00	1.17
10	221	130	1,657	12.75	1.07
11	210	8	101	12.62	1.06
12	178	14	172	12.29	1.03
13	148	12	147	12.25	1.02
14	181	2	24	12.00	1.00
15	111	96	1,152	12.00	1.00
	AVG	899	10,756	11.96	1.00
16	275	8	94	11.75	0.98
17	149	31	362	11.68	0.98
18	226	3	33	11.00	0.92
19	152	21	231	11.00	0.92
20	103	2	19	9.50	0.79
21	353	2	18	9.00	0.75
22	337	29	261	9.00	0.75
23	299	21	186	8.86	0.74
24	170	15	131	8.73	0.73
25	272	4	34	8.50	0.71
26	161	1	8	8.00	0.67
27	339	40	319	7.98	0.67
28	191	65	509	7.83	0.65
29	182	30	219	7.30	0.61
30	338	16	107	6.69	0.56
31	211	11	67	6.09	0.51
32	186	31	178	5.74	0.48
33	236	24	131	5.46	0.46
34	244	2	10	5.00	0.42
35	346	10	41	4.10	0.34
36	242	1	4	4.00	0.33
37	343	5	17	3.40	0.28
LOWEST	328	1	1	1.00	0.08

EXHIBIT 48C

DIRECT COSTS BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
CURBSIDE

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED. DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

AVG DIRECT COST/OSHA RECORDABLE INJ				DIRECT COST PER MAN YEAR			
IRIS USER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)	IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
326	3	11,385	27.09	326	28,887	2,364.65	10.67
362	18	889	2.11	210	13,088	913.52	4.12
316	23	809	1.93	149	50,422	726.51	3.28
337	31	769	1.83	316	56,314	661.11	2.98
355	4	768	1.83	103	5,266	645.60	2.91
210	9	664	1.58	221	269,891	585.85	2.64
221	131	600	1.43	111	279,225	517.47	2.34
181	2	594	1.41	362	75,555	423.45	1.91
103	3	567	1.35	152	66,506	414.58	1.87
339	47	560	1.33	244	4,171	398.90	1.80
179	118	500	1.19	339	138,909	378.88	1.71
338	16	487	1.16	236	88,852	351.49	1.59
197	15	486	1.16	337	138,909	343.07	1.55
111	167	432	1.03	179	369,171	319.56	1.44
125	174	432	1.03	359	14,352	263.94	1.19
AVG	1,335	420	1.00	346	12,514	260.82	1.18
323	8	411	0.98	211	33,371	256.63	1.16
149	53	346	0.82	181	9,386	253.36	1.14
152	40	344	0.82	125	600,686	250.46	1.13
178	19	329	0.78	191	186,463	227.06	1.02
244	3	277	0.66	AVG	5,070,610	221.58	1.00
170	21	263	0.63	355	29,200	210.55	0.95
236	61	256	0.61	197	80,561	180.81	0.82
148	25	253	0.60	328	3,911	128.37	0.58
191	85	249	0.59	299	105,481	127.99	0.58
359	8	237	0.56	338	138,909	112.23	0.51
272	6	225	0.54	275	59,130	107.19	0.48
275	15	211	0.50	343	18,771	99.73	0.45
211	20	210	0.50	242	4,171	83.42	0.38
182	42	205	0.49	148	175,200	72.09	0.33
242	1	174	0.41	323	96,360	70.05	0.32

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AVG DIRECT COST/OSHA RECORDABLE INJ !        DIRECT COST PER  MAN YEAR
------------------------------------!------------------------------------------
IRIS  NO. OSHA   AVG    AVG RATIO   ! IRIS     MAN-HRS     COSTS   AVG RATIO
USER   RECORD   COST (AVG COST/AVG) ! USER    EXPOSURE   PER M-Y (COSTS/AVG)
NO.     INJ                         !  NO.
                                    !
 186     47      167       0.40     !  182    258,107      66.92        0.30
 353      3      163       0.39     !  186    250,286      62.74        0.28
 226      9      148       0.35     !  226     60,069      44.48        0.20
 161      3      103       0.25     !  170    323,494      34.10        0.15
 299     69       98       0.23     !  353     31,286      31.32        0.14
 346     19       86       0.20     !  161     27,114      22.79        0.10
 343     11       85       0.20     !  178    583,479      21.40        0.10
 328      3       84       0.20     !  272    140,786      19.16        0.09
 113      1       62       0.15     !  265      5,475       7.31        0.03
 235      1       25       0.06     !  235      7,509       6.66        0.03
 265      1       20       0.05     !  113     25,498       4.86        0.02
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EXHIBIT 49A

AVERAGE INJURY RATES BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
ALLEY

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE.
OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

OSHA INCIDENCE RATE

IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO
171	392,636	163	83	1.06
AVG	421,836	165	78	1.00
172	10,429	1	19	0.25
204	18,771	1	11	0.14

INCIDENCE RATE - LWC

IRIS USER NO.	NO. INJ	RATE	AVG RATIO
171	124	63	1.07
AVG	124	59	1.00

SEVERITY RATE

IRIS USER NO.	RATE	AVG RATIO
171	548	1.07
AVG	510	1.00

EXHIBIT 49B

AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
ALLEY

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE
HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO LOST WKDY CASES	DAYS LOST	AVG WKDYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	171	124	1,076	8.68	1.00

EXHIBIT 49C

DIRECT COSTS BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
ALLEY

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED. DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

AVG DIRECT COST/OSHA RECORDABLE INJ				DIRECT COST PER MAN YEAR			
IRIS USER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)	IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
171	163	296	1.01	171	392,636	246.09	1.07
AVG	165	294	1.00	AVG	421,836	230.20	1.00
204	1	136	0.46	172	10,429	20.33	0.09
172	1	106	0.36	204	18,771	14.49	0.06

EXHIBIT 50A

AVERAGE INJURY RATES BY 'IRIS' USERS RANKED FROM HIGHEST TO LOWEST MECHANIZED

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE. OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES. SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS. A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50. A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

OSHA INCIDENCE RATE					INCIDENCE RATE - LWC				SEVERITY RATE		
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATIO
172	76,650	33	86	1.96	172	12	31	1.85	172	524	2.03
AVG	177,390	39	44	1.00	AVG	15	17	1.00	AVG	258	1.00
204	41,714	3	14	0.33	204	2	10	0.57	204	77	0.30
178	56,940	3	11	0.24	178	1	4	0.21	178	42	0.16

EXHIBIT 50B

AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE BY 'IRIS' USERS RANKED FROM HIGHEST TO LOWEST MECHANIZED

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE
HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO LOST WKDY CASES	DAYS LOST	AVG WKDYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	172	12	201	16.75	1.10
	AVG	15	229	15.27	1.00
2	178	1	12	12.00	0.79
LOWEST	204	2	16	8.00	0.52

EXHIBIT 50C

DIRECT COSTS BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
MECHANIZED

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED. DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

AVG DIRECT COST/OSHA RECORDABLE INJ

IRIS USER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)
204	3	275	1.26
172	33	219	1.01
AVG	39	218	1.00
178	3	147	0.67

DIRECT COST PER MAN YEAR

IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
172	76,650	188.60	1.97
AVG	177,390	95.77	1.00
204	41,714	39.60	0.41
178	56,940	15.45	0.16

EXHIBIT 51A

AVERAGE INJURY RATES BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
ALLEY & CURBSIDE

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE.
OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000. ROUCHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

OSHA INCIDENCE RATE					INCIDENCE RATE - LWC				SEVERITY RATE		
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATIO
217	491,429	514	209	3.59	341	35	148	6.72	363	3,713	12.48
341	47,241	42	178	3.06	363	1	120	5.43	341	2,180	7.33
363	1,670	1	120	2.06	325	19	112	5.10	296	1,473	4.95
325	33,789	20	118	2.03	344	21	81	3.65	318	1,015	3.41
318	50,057	23	92	1.58	318	17	68	3.08	350	955	3.21
157	68,829	31	90	1.55	348	21	68	3.08	344	913	3.07
344	52,143	21	81	1.38	157	18	52	2.37	348	762	2.56
348	61,946	23	74	1.28	350	13	49	2.20	325	716	2.41
350	53,603	18	67	1.15	296	7	48	2.17	172	473	1.59
352	42,120	14	66	1.14	217	84	34	1.55	340	358	1.21
172	880,432	291	66	1.14	161	14	33	1.49	146	316	1.06
146	154,395	49	63	1.09	172	124	28	1.28	352	313	1.05
161	85,410	26	61	1.05	146	19	25	1.12	AVG	297	1.00
AVG	4,481,710	1304	58	1.00	133	7	24	1.08	157	262	0.88
296	29,200	7	48	0.82	AVG	494	22	1.00	109	259	0.87
204	8,343	2	48	0.82	330	11	22	1.00	330	258	0.87
101	408,800	94	46	0.79	261	1	20	0.91	201	204	0.68
133	58,975	12	41	0.70	109	12	14	0.64	161	197	0.66
330	100,114	14	28	0.48	201	5	12	0.54	217	193	0.65
201	84,471	11	26	0.45	101	23	11	0.51	261	180	0.60
261	10,011	1	20	0.34	115	19	10	0.47	133	163	0.55
340	407,966	40	20	0.34	352	2	9	0.43	101	139	0.47
331	32,850	3	18	0.31	340	18	9	0.40	115	134	0.45
115	367,659	29	16	0.27	283	2	5	0.24	283	11	0.04
109	168,943	12	14	0.24	346	1	3	0.14	346	3	0.01
283	75,086	5	13	0.23							
346	66,743	1	3	0.05							

EXHIBIT 51B

AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
ALLEY & CURBSIDE

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE
HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO LOST WKDY CASES	DAYS LOST	AVG WKDYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	340	18	731	40.61	2.99
2	352	2	66	33.00	2.43
3	363	1	31	31.00	2.28
4	296	7	215	30.71	2.26
5	350	13	256	19.69	1.45
6	109	12	219	18.25	1.34
7	201	5	86	17.20	1.27
8	341	[illegible]	405	16.87	1.24
9	172	[illegible]	2,083	16.80	1.24
10	318	17	254	14.94	1.10
	AVG	483	6,554	13.57	1.00
11	115	19	246	12.95	0.95
12	146	19	244	12.84	0.95
13	101	23	284	12.35	0.91
14	330	11	129	11.73	0.86
15	344	21	238	11.33	0.84
16	348	21	236	11.24	0.83
17	261	1	9	9.00	0.66
18	133	7	48	6.86	0.51
19	325	19	121	6.37	0.47
20	161	14	84	6.00	0.44
21	217	84	474	5.64	0.42
22	157	18	90	5.00	0.37
23	283	2	4	2.00	0.15
LOWEST	346	1	1	1.00	0.07

EXHIBIT 51C

DIRECT COSTS BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
ALLEY & CURBSIDE

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED. DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

AVG DIRECT COST/OSHA RECORDABLE INJ				DIRECT COST PER MAN YEAR			
IRIS USER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)	IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
296	7	1,653	6.23	341	47,241	1,351.40	8.73
109	12	1,126	4.24	363	1,670	1,273.05	8.22
363	1	1,063	4.00	296	29,200	792.67	5.12
261	1	960	3.62	318	50,057	492.64	3.18
341	42	759	2.86	325	33,789	485.08	3.13
340	40	688	2.59	350	53,603	397.81	2.57
350	18	592	2.23	344	52,143	390.20	2.52
318	23	536	2.02	348	61,946	334.39	2.16
344	21	484	1.82	172	880,432	216.36	1.40
348	23	450	1.70	217	491,429	202.88	1.31
325	20	407	1.53	146	154,395	199.76	1.29
115	29	344	1.30	261	10,011	191.78	1.24
330	14	343	1.29	157	68,829	173.85	1.12
172	291	327	1.23	352	42,120	170.61	1.10
146	49	314	1.18	109	168,943	162.32	1.05
AVG	1,304	265	1.00	AVG	4,481,710	154.83	1.00
352	14	257	0.97	340	407,966	134.84	0.87
133	12	202	0.76	161	85,410	97.04	0.63
157	31	193	0.73	330	100,114	95.87	0.62
201	11	189	0.71	133	58,975	82.34	0.53
161	26	159	0.60	101	408,800	67.90	0.44
101	94	148	0.56	204	8,343	64.01	0.41
204	2	133	0.50	115	367,659	56.20	0.36
217	514	97	0.37	201	84,471	49.11	0.32
346	1	88	0.33	283	75,086	8.20	0.05
283	5	62	0.23	331	32,850	5.48	0.04
331	3	30	0.11	346	66,743	2.64	0.02

EXHIBIT 52A

AVERAGE INJURY RATES BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
CS &BKYD W TUB

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE.
OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

OSHA INCIDENCE RATE					INCIDENCE RATE - LWC				SEVERITY RATE		
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATIO
183	337,886	147	87	1.12	265	88	64	1.20	265	673	1.64
265	274,480	119	87	1.11	183	94	56	1.04	AVG	411	1.00
AVG	682,237	266	78	1.00	AVG	182	53	1.00	183	284	0.69

EXHIBIT 52B

AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
CS & BY W TUB

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO LOST WKDY CASES	DAYS LOST	AVG WKDYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	265	88	923	10.49	1.35
	AVG	181	1,403	7.75	1.00
LOWEST	183	93	480	5.16	0.67

EXHIBIT 52C

DIRECT COSTS BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
CS & BY W TUB

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED. DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

AVG DIRECT COST/OSHA RECORDABLE INJ

IRIS USER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)
265	119	297	1.29
AVG	266	231	1.00
183	147	178	0.77

DIRECT COST PER MAN YEAR

IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
265	274,480	257.49	1.43
AVG	682,237	180.12	1.00
183	337,886	154.51	0.86

EXHIBIT 53A

AVERAGE INJURY RATES BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
CS/BY/BY W TUB/ALLEY

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE.
OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

OSHA INCIDENCE RATE					INCIDENCE RATE - LWC				SEVERITY RATE		
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATIO
242	56,314	1	4	1.00	242	1	4	1.00	242	11	1.00
242	56,314	1	0	1.00	242	1	0	1.00			

EXHIBIT 53B

AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
CS/BY/BY W TUB/ALLEY

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE
HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO LOST WKDY CASES	DAYS LOST	AVG WKDYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	242	1	3	3.00	1.00

EXHIBIT 53C

DIRECT COSTS BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
CS/BY/BY W TUB/ALLEY

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED. DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

AVG DIRECT COST/OSHA RECORDABLE INJ				DIRECT COST PER MAN YEAR			
IRIS USER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)	IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
242	1	104	1.00	242	56,314	3.69	1.00
AVG	1	104	1.00	AVG	56,314	3.69	1.00

EXHIBIT 54A

AVERAGE INJURY RATES BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
BY W TUB/BY W CART

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE.
OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES /
MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO
THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR.
DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL
TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME
EMPLOYEES PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE
HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

	OSHA INCIDENCE RATE				INCIDENCE RATE - LWC				SEVERITY RATE		
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATIO
244	33,371	16	96	1.52	244	11	66	1.68	244	294	1.38
AVG	117,530	37	63	1.00	AVG	23	39	1.00	AVG	213	1.00
347	84,159	21	50	0.79	347	12	29	0.73	347	181	0.85

EXHIBIT 54B

AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
BY W TUB/BY W CART

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE
HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO LOST WKDY CASES	DAYS LOST	AVG WKDYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	347	12	76	6.33	1.17
	AVG	23	125	5.43	1.00
LOWEST	244	11	49	4.45	0.82

EXHIBIT 54C

DIRECT COSTS BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
BY W TUB/BY W CART

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED. DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

AVG DIRECT COST/OSHA RECORDABLE INJ				DIRECT COST PER MAN YEAR			
IRIS USER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)	IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
244	16	226	1.32	244	33,371	216.65	2.01
AVG	37	171	1.00	AVG	117,530	107.53	1.00
347	21	129	0.75	347	84,159	64.26	0.60

EXHIBIT 55A

AVERAGE INJURY RATES BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
CS/ALLEY/BY W TUB

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE.
OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

OSHA INCIDENCE RATE					INCIDENCE RATE - LWC				SEVERITY RATE		
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATIO
316	407,131	186	91	1.25	316	124	61	1.24	358	2,459	3.07
AVG	774,217	283	73	1.00	235	24	56	1.13	316	1,100	1.37
235	86,349	30	69	0.95	AVG	190	49	1.00	AVG	802	1.00
358	12,201	4	66	0.90	260	34	41	0.83	235	561	0.70
260	166,857	46	55	0.75	358	2	33	0.67	260	422	0.53
349	101,679	17	33	0.46	349	6	12	0.24	349	236	0.29

EXHIBIT 55B

AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
CS/ALLEY/BY W TUB

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO LOST WKDY CASES	DAYS LOST	AVG WKDYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	358	2	150	75.00	4.59
2	349	6	120	20.00	1.22
3	316	124	2,239	18.06	1.11
	AVG	190	3,103	16.33	1.00
4	260	34	352	10.35	0.63
LOWEST	235	24	242	10.08	0.62

EXHIBIT 55C

DIRECT COSTS BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
CS/ALLEY/BY W TUB

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED. DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

AVG DIRECT COST/OSHA RECORDABLE INJ				DIRECT COST PER MAN YEAR			
IRIS USER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)	IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
358	4	1,001	1.84	358	12,201	655.99	1.65
316	186	642	1.18	316	407,131	586.70	1.48
AVG	283	543	1.00	AVG	774,217	397.28	1.00
235	30	528	0.97	235	86,349	366.98	0.92
349	17	257	0.47	260	166,857	121.52	0.31
260	46	220	0.41	349	101,679	86.04	0.22

EXHIBIT 56A

AVERAGE INJURY RATES BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
CS/BY

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE. OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES. SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

OSHA INCIDENCE RATE					INCIDENCE RATE - LWC				SEVERITY RATE		
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATIO
295	28,389	5	35	1.00	295	2	14	1.00	295	77	1.00
295	28,389	5	0	1.00	295	2	0	1.00			

EXHIBIT 56B

AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
CS/BY

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO LOST WKDY CASES	DAYS LOST	AVG WKDYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	295	2	11	5.50	1.00

EXHIBIT 56C

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                                DIRECT COSTS BY 'IRIS' USERS
                               RANKED FROM HIGHEST TO LOWEST
                                 CS/BY

EPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

EFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES,
ORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS
E.G. INJURY LEAVE) ONLY.  INDIRECT COSTS ARE NOT INCLUDED.
IRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION
MPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.

NSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE
OW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
 GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
 POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.


/G DIRECT COST/OSHA RECORDABLE INJ !        DIRECT COST PER  MAN YEAR
-----------------------------------!-----------------------------------------------
RIS  NO. OSHA   AVG    AVG RATIO   ! IRIS     MAN-HRS      COSTS    AVG RATIO
SER   RECORD   COST  (AVG COST/AVG) ! USER    EXPOSURE     PER M-Y  (COSTS/AVG)
IO.    INJ                         !  NO.
                                   !
295     5      139      1.00       !  295     28,389       48.82       1.00
AVG     5      139      1.00       !  AVG     28,389       48.82       1.00
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EXHIBIT 57A

AVERAGE INJURY RATES BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
ALLEY/BY W CART

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE. OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES. SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS. A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50. A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

OSHA INCIDENCE RATE					INCIDENCE RATE - LWC				SEVERITY RATE		
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATIO
237	193,189	39	40	1.60	237	22	23	1.11	237	206	1.11
AVG	1,225,620	155	25	1.00	AVG	126	21	1.00	AVG	186	1.00
109	1,032,430	116	22	0.89	109	104	20	0.98	109	182	0.98

EXHIBIT 57B

AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
ALLEY/BY W CART

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO LOST WKDY CASES	DAYS LOST	AVG WKDYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	237	22	199	9.05	1.00
	AVG	126	1,139	9.04	1.00
LOWEST	109	104	940	9.04	1.00

EXHIBIT 57C

DIRECT COSTS BY 'IRIS' USERS RANKED FROM HIGHEST TO LOWEST
ALLEY/BY W CART

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED. DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

AVG DIRECT COST/OSHA RECORDABLE INJ

IRIS USER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)
109	116	578	1.09
AVG	155	529	1.00
237	39	384	0.72

DIRECT COST PER MAN YEAR

IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
237	193,189	157.29	1.14
AVG	1,225,620	138.37	1.00
109	1,032,430	134.83	0.97

EXHIBIT 58A

AVERAGE INJURY RATES BY 'IRIS' USERS RANKED FROM HIGHEST TO LOWEST CS/ALLEY/BY W TUB/BY W CART

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: AVERAGE RATIO = RATE / AVERAGE FOR THE RATE.
OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000. ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

OSHA INCIDENCE RATE					INCIDENCE RATE - LWC				SEVERITY RATE		
IRIS USER NO.	MAN-HOURS EXPOSURE	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	NO. INJ	RATE	AVG RATIO	IRIS USER NO.	RATE	AVG RATIO
207	220,564	97	88	1.91	207	44	40	1.93	207	403	1.69
324	20,075	5	50	1.08	324	3	30	1.44	324	399	1.67
AVG	569,557	131	46	1.00	AVG	59	21	1.00	AVG	239	1.00
292	328,917	29	18	0.38	292	12	7	0.35	292	119	0.50

EXHIBIT 58B

AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
CS/ALLEY/BY W TUB/BY W CART

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE
HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

RANK	IRIS USER NO.	NO LOST WKDY CASES	DAYS LOST	AVG WKDYS LOST	AVG RATIO (DAYS / AVG)
HIGHEST	292	12	196	16.33	1.42
2	324	3	40	13.33	1.16
	AVG	59	680	11.53	1.00
LOWEST	207	44	444	10.09	0.88

EXHIBIT 58C

DIRECT COSTS BY 'IRIS' USERS
RANKED FROM HIGHEST TO LOWEST
CS/ALLEY/BY W TUB/BY W CART

REPORTING PERIOD: OCTOBER 1976 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED. DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.

INSTRUCTIONS: FIND YOUR ORGANIZATION'S USER NUMBER AND COMPARE HOW IT RANKS WITH THE AVERAGE AND OTHER IRIS USERS.
A GOOD STANDING IS AN AVERAGE RATIO OF LESS THAN .50.
A POOR STANDING IS AN AVERAGE RATIO OF GREATER THAN 1.25.

AVG DIRECT COST/OSHA RECORDABLE INJ				DIRECT COST PER MAN YEAR			
IRIS USER NO.	NO. OSHA RECORD INJ	AVG COST	AVG RATIO (AVG COST/AVG)	IRIS USER NO.	MAN-HRS EXPOSURE	COSTS PER M-Y	AVG RATIO (COSTS/AVG)
324	5	253	1.38	207	220,564	148.11	1.76
292	29	219	1.20	324	20,075	130.81	1.55
AVG	131	183	1.00	AVG	569,557	84.31	1.00
207	97	168	0.92	292	328,917	38.68	0.46

EXHIBIT 59A

ALL USERS
AVERAGE INJURY RATES
BY AGE GROUP
* COLLECTION DIVISION *
ACCIDENT TYPE: OVEREXERTION INVOLVING CONT

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

	OSHA INCIDENCE RATE			INCIDENCE RATE - LWC		SEVERITY RATE	
AGE GROUP	MAN-HOURS EXPOSURE	NO. INJ	RATE	NO. INJ	RATE	WKDYS LOST	RATE
< 20 YEARS	915,277	74	16.17	46	10	310	68
20-24 YEARS	4,439,634	312	14.06	223	10	2,110	95
25-29 YEARS	4,770,354	345	14.46	243	10	2,786	117
30-34 YEARS	3,682,983	185	10.05	152	8	1,739	94
35-39 YEARS	3,507,630	149	8.50	121	7	2,020	115
40-44 YEARS	3,333,530	98	5.88	84	5	1,258	75
45-49 YEARS	3,262,240	89	5.46	72	4	1,209	74
50-54 YEARS	2,960,061	58	3.92	49	3	865	58
55-59 YEARS	1,959,352	33	3.37	29	3	306	31
60-64 YEARS	827,002	11	2.66	10	2	66	16
> 64 YEARS	188,064	3	3.19	3	3	9	10
UNKNOWN	66,165	7	21.16	7	21	60	181
TOTAL	29,912,300	1,364	9.12	1,039	7	12,738	85

EXHIBIT 59B

ALL USERS
AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
GROUPED BY AGE
* COLLECTION DIVISION *
ACCIDENT TYPE: OVEREXERTION INVOLVING CONT

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

AGE GROUP	NO LOST WKDY CASES	ACTUAL DAYS LOST	AVG WKDYS LOST
< 20 YEARS	46	310	6.74
20-24 YEARS	223	2,110	9.46
25-29 YEARS	243	2,786	11.47
30-34 YEARS	152	1,739	11.44
35-39 YEARS	121	2,020	16.69
40-44 YEARS	84	1,258	14.98
45-49 YEARS	72	1,209	16.79
50-54 YEARS	49	865	17.65
55-59 YEARS	29	306	10.55
60-64 YEARS	10	66	6.60
> 64 YEARS	3	9	3.00
UNKNOWN	7	60	8.57
TOTAL	1,039	12,738	12.26

EXHIBIT 59C

ALL USERS
DIRECT COSTS
GROUPED BY AGE
* COLLECTION DIVISION *
ACCIDENT TYPE: OVEREXERTION INVOLVING CONT

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.

AVG DIRECT COST PER OSHA RECORDABLE INJ			DIRECT COST PER MAN YEAR	
AGE GROUP	NO. OSHA RECORD INJ	AVG COST	MAN-HRS EXPOSURE	COSTS PER M-Y
< 20 YEARS	74	179	915,277	29.26
20-24 YEARS	312	329	4,439,634	46.29
25-29 YEARS	345	372	4,770,354	53.77
30-34 YEARS	185	458	3,682,983	46.22
35-39 YEARS	149	633	3,507,630	53.83
40-44 YEARS	98	568	3,333,530	33.44
45-49 YEARS	89	707	3,262,240	38.60
50-54 YEARS	58	1,986	2,960,061	77.84
55-59 YEARS	33	409	1,959,352	13.87
60-64 YEARS	11	295	827,002	7.85
>64 YEARS	3	150	188,064	4.79
UNKNOWN	7	409	66,165	86.51
TOTAL	1,364	497	9,912,300	45.33

EXHIBIT 60A

ALL USERS
AVERAGE INJURY RATES
BY AGE GROUP
* COLLECTION DIVISION *
ACCIDENT TYPE: SLIP ON SAME LEVEL

EPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

EFINITIONS: OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / AN-HOURS EXPOSURE) X 200,000.
OUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES ER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL REATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
EVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000.
OUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME MPLOYEES PER YEAR.

	OSHA INCIDENCE RATE			INCIDENCE RATE - LWC		SEVERITY RATE	
GE ROUP	MAN-HOURS EXPOSURE	NO. INJ	RATE	NO. INJ	RATE	WKDYS LOST	RATE
20 YEARS	915,277	13	2.84	8	2	39	9
0-24 YEARS	4,439,634	67	3.02	44	2	416	19
5-29 YEARS	4,770,354	89	3.73	65	3	622	26
0-34 YEARS	3,682,983	59	3.20	48	3	441	24
5-39 YEARS	3,507,630	40	2.28	25	1	405	23
0-44 YEARS	3,333,530	38	2.28	31	2	199	12
5-49 YEARS	3,262,240	25	1.53	23	1	562	34
0-54 YEARS	2,960,061	27	1.82	20	1	378	26
5-59 YEARS	1,959,352	14	1.43	11	1	250	26
0-64 YEARS	827,002	5	1.21	5	1	36	9
64 YEARS	188,064	0	0.00	0	0	0	0
NKNOWN	66,165	1	3.02	1	3	4	12
TOTAL	29,912,300	378	2.53	281	2	3,352	22

EXHIBIT 60B

ALL USERS
AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
GROUPED BY AGE
* COLLECTION DIVISION *
ACCIDENT TYPE: SLIP ON SAME LEVEL

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

AGE GROUP	NO LOST WKDY CASES	ACTUAL DAYS LOST	AVG WKDYS LOST
< 20 YEARS	8	39	4.87
20-24 YEARS	44	416	9.45
25-29 YEARS	65	622	9.57
30-34 YEARS	48	441	9.19
35-39 YEARS	25	405	16.20
40-44 YEARS	31	199	6.42
45-49 YEARS	23	562	24.43
50-54 YEARS	20	378	18.90
55-59 YEARS	11	250	22.73
60-64 YEARS	5	36	7.20
> 64 YEARS	0	0	0.00
UNKNOWN	1	4	4.00
TOTAL	281	3,352	11.93

EXHIBIT 60C

ALL USERS
DIRECT COSTS
GROUPED BY AGE
* COLLECTION DIVISION *
ACCIDENT TYPE: SLIP ON SAME LEVEL

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.

AVG DIRECT COST PER OSHA RECORDABLE INJ			DIRECT COST PER MAN YEAR	
AGE GROUP	NO. OSHA RECORD INJ	AVG COST	MAN-HRS EXPOSURE	COSTS PER M-Y
< 20 YEARS	13	146	915,277	4.14
20-24 YEARS	67	373	4,439,634	11.25
25-29 YEARS	89	306	4,770,354	11.44
30-34 YEARS	59	312	3,682,983	9.98
35-39 YEARS	40	383	3,507,630	8.74
40-44 YEARS	38	283	3,333,530	6.46
45-49 YEARS	25	1,150	3,262,240	17.62
50-54 YEARS	27	786	2,960,061	14.33
55-59 YEARS	14	490	1,959,352	7.00
60-64 YEARS	5	362	827,002	4.65
>64 YEARS	0	0	188,064	0.00
UNKNOWN	1	248	66,165	7.50
TOTAL	378	416	29,912,300	10.54

EXHIBIT 61A

ALL USERS
AVERAGE INJURY RATES
BY AGE GROUP
* COLLECTION DIVISION *
ACCIDENT TYPE: STRUCK BY WASTE

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

AGE GROUP	OSHA INCIDENCE RATE MAN-HOURS EXPOSURE	NO. INJ	RATE	INCIDENCE RATE - LWC NO. INJ	RATE	SEVERITY RAT WKDYS LOST	RAT
< 20 YEARS	915,277	12	2.62	3	1	8	
20-24 YEARS	4,439,634	77	3.47	27	1	123	
25-29 YEARS	4,770,354	82	3.44	27	1	79	
30-34 YEARS	3,682,983	53	2.88	18	1	250	1
35-39 YEARS	3,507,630	42	2.39	21	1	117	
40-44 YEARS	3,333,530	34	2.04	14	1	61	
45-49 YEARS	3,262,240	29	1.78	10	1	43	
50-54 YEARS	2,960,061	24	1.62	12	1	71	
55-59 YEARS	1,959,352	14	1.43	9	1	84	
60-64 YEARS	827,002	6	1.45	4	1	37	
> 64 YEARS	188,064	1	1.06	1	1	1	
UNKNOWN	66,165	0	0.00	0	0	0	
TOTAL	29,912,300	374	2.50	146	1	874	

EXHIBIT 61B

ALL USERS
AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
GROUPED BY AGE
* COLLECTION DIVISION *
ACCIDENT TYPE: STRUCK BY WASTE

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

AGE GROUP	NO LOST WKDY CASES	ACTUAL DAYS LOST	AVG WKDYS LOST
< 20 YEARS	3	8	2.67
20-24 YEARS	27	123	4.56
25-29 YEARS	27	79	2.93
30-34 YEARS	18	250	13.89
35-39 YEARS	21	117	5.57
40-44 YEARS	14	61	4.36
45-49 YEARS	10	43	4.30
50-54 YEARS	12	71	5.92
55-59 YEARS	9	84	9.33
60-64 YEARS	4	37	9.25
> 64 YEARS	1	1	1.00
UNKNOWN	0	0	0.00
TOTAL	146	874	5.99

EXHIBIT 61C

ALL USERS
DIRECT COSTS
GROUPED BY AGE
* COLLECTION DIVISION *
ACCIDENT TYPE: STRUCK BY WASTE

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.

AVG DIRECT COST PER OSHA RECORDABLE INJ			DIRECT COST PER MAN YEAR	
AGE GROUP	NO. OSHA RECORD INJ	AVG COST	MAN-HRS EXPOSURE	COSTS PER M-Y
< 20 YEARS	12	72	915,277	1.88
20-24 YEARS	77	89	4,439,634	3.14
25-29 YEARS	82	99	4,770,354	3.42
30-34 YEARS	53	313	3,682,983	9.07
35-39 YEARS	42	187	3,507,630	4.55
40-44 YEARS	34	106	3,333,530	2.18
45-49 YEARS	29	106	3,262,240	1.89
50-54 YEARS	24	177	2,960,061	2.91
55-59 YEARS	14	353	1,959,352	5.08
60-64 YEARS	6	296	827,002	4.30
>64 YEARS	1	82	188,064	0.87
UNKNOWN	0	0	66,165	0.00
TOTAL	374	155	29,912,300	3.91

EXHIBIT 62A

ALL USERS
AVERAGE INJURY RATES
BY AGE GROUP
* COLLECTION DIVISION *
ACCIDENT TYPE: FALL ON SAME LEVEL

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

	OSHA INCIDENCE RATE			INCIDENCE RATE - LWC		SEVERITY RATE	
AGE GROUP	MAN-HOURS EXPOSURE	NO. INJ	RATE	NO. INJ	RATE	WKDYS LOST	RATE
< 20 YEARS	915,277	16	3.50	10	2	222	49
20-24 YEARS	4,439,634	57	2.57	32	1	226	10
25-29 YEARS	4,770,354	53	2.22	36	2	410	17
30-34 YEARS	3,682,983	43	2.34	32	2	331	18
35-39 YEARS	3,507,630	40	2.28	30	2	582	33
40-44 YEARS	3,333,530	30	1.80	26	2	407	24
45-49 YEARS	3,262,240	35	2.15	24	1	401	25
50-54 YEARS	2,960,061	23	1.55	18	1	217	15
55-59 YEARS	1,959,352	23	2.35	20	2	368	38
60-64 YEARS	827,002	12	2.90	8	2	108	26
> 64 YEARS	188,064	3	3.19	2	2	48	51
UNKNOWN	66,165	2	6.05	1	3	14	42
TOTAL	29,912,300	337	2.25	239	2	3,334	22

EXHIBIT 62B

ALL USERS
AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
GROUPED BY AGE
* COLLECTION DIVISION *
ACCIDENT TYPE: FALL ON SAME LEVEL

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

AGE GROUP	NO LOST WKDY CASES	ACTUAL DAYS LOST	AVG WKDYS LOST
< 20 YEARS	10	222	22.20
20-24 YEARS	32	226	7.06
25-29 YEARS	36	410	11.39
30-34 YEARS	32	331	10.34
35-39 YEARS	30	582	19.40
40-44 YEARS	26	407	15.65
45-49 YEARS	24	401	16.71
50-54 YEARS	18	217	12.06
55-59 YEARS	20	368	18.40
60-64 YEARS	8	108	13.50
> 64 YEARS	2	48	24.00
UNKNOWN	1	14	14.00
TOTAL	239	3,334	13.95

EXHIBIT 62C

ALL USERS
DIRECT COSTS
GROUPED BY AGE
* COLLECTION DIVISION *
ACCIDENT TYPE: FALL ON SAME LEVEL

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.

AVG DIRECT COST PER OSHA RECORDABLE INJ			DIRECT COST PER MAN YEAR	
AGE GROUP	NO. OSHA RECORD INJ	AVG COST	MAN-HRS EXPOSURE	COSTS PER M-Y
< 20 YEARS	16	461	915,277	16.14
20-24 YEARS	57	184	4,439,634	4.88
25-29 YEARS	53	406	4,770,354	9.10
30-34 YEARS	43	521	3,682,983	12.17
35-39 YEARS	40	616	3,507,630	14.08
40-44 YEARS	30	575	3,333,530	10.38
45-49 YEARS	35	534	3,262,240	11.49
50-54 YEARS	23	472	2,960,061	7.33
55-59 YEARS	23	835	1,959,352	19.64
60-64 YEARS	12	498	827,002	14.46
>64 YEARS	3	764	188,064	24.39
UNKNOWN	2	339	66,165	20.49
TOTAL	337	479	29,912,300	10.84

EXHIBIT 63A

ALL USERS
AVERAGE INJURY RATES
BY AGE GROUP
* COLLECTION DIVISION *
ACCIDENT TYPE: VEHICLE ACCIDENT

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

	OSHA INCIDENCE RATE			INCIDENCE RATE - LWC		SEVERITY RAT	
AGE GROUP	MAN-HOURS EXPOSURE	NO. INJ	RATE	NO. INJ	RATE	WKDYS LOST	RAT
< 20 YEARS	915,277	13	2.84	10	2	215	
20-24 YEARS	4,439,634	52	2.34	40	2	670	
25-29 YEARS	4,770,354	52	2.18	34	1	673	
30-34 YEARS	3,682,983	37	2.01	27	1	556	
35-39 YEARS	3,507,630	23	1.31	17	1	350	
40-44 YEARS	3,333,530	29	1.74	22	1	276	
45-49 YEARS	3,262,240	22	1.35	15	1	371	
50-54 YEARS	2,960,061	23	1.55	20	1	855	
55-59 YEARS	1,959,352	10	1.02	9	1	242	
60-64 YEARS	827,002	6	1.45	4	1	54	
> 64 YEARS	188,064	2	2.13	2	2	5	
UNKNOWN	66,165	0	0.00	0	0	0	
TOTAL	29,912,300	269	1.80	200	1	4,267	

EXHIBIT 63B

ALL USERS
AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
GROUPED BY AGE
* COLLECTION DIVISION *
ACCIDENT TYPE: VEHICLE ACCIDENT

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

AGE GROUP	NO LOST WKDY CASES	ACTUAL DAYS LOST	AVG WKDYS LOST
< 20 YEARS	10	215	21.50
20-24 YEARS	40	670	16.75
25-29 YEARS	34	673	19.79
30-34 YEARS	27	556	20.59
35-39 YEARS	17	350	20.59
40-44 YEARS	22	276	12.55
45-49 YEARS	15	371	24.73
50-54 YEARS	20	855	42.75
55-59 YEARS	9	242	26.89
60-64 YEARS	4	54	13.50
> 64 YEARS	2	5	2.50
UNKNOWN	0	0	0.00
TOTAL	200	4,267	21.33

EXHIBIT 63C

ALL USERS
DIRECT COSTS
GROUPED BY AGE
* COLLECTION DIVISION *
ACCIDENT TYPE: VEHICLE ACCIDENT

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED
DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.
DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.

AVG DIRECT COST PER OSHA RECORDABLE INJ			DIRECT COST PER MAN YEAR	
AGE GROUP	NO. OSHA RECORD INJ	AVG COST	MAN-HRS EXPOSURE	COSTS PER M-Y
< 20 YEARS	13	766	915,277	21.77
20-24 YEARS	52	530	4,439,634	12.42
25-29 YEARS	52	533	4,770,354	11.65
30-34 YEARS	37	1,578	3,682,983	31.70
35-39 YEARS	23	628	3,507,630	8.39
40-44 YEARS	29	466	3,333,530	8.11
45-49 YEARS	22	705	3,262,240	9.51
50-54 YEARS	23	1,695	2,960,061	26.44
55-59 YEARS	10	1,499	1,959,352	15.30
60-64 YEARS	6	656	827,002	9.51
>64 YEARS	2	190	188,064	4.04
UNKNOWN	0	0	66,165	0.00
TOTAL	269	838	29,912,300	15.10

EXHIBIT 64A

ALL USERS
AVERAGE INJURY RATES
BY EXPERIENCE GROUP
* COLLECTION DIVISION *
ACCIDENT TYPE: OVEREXERTION INVOLVING CONT

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000.
OUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES ER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
EVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000.
OUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME MPLOYEES PER YEAR.

	OSHA INCIDENCE RATE			INCIDENCE RATE - LWC		SEVERITY RATE	
XPERIENCE ROUP	MAN-HOURS EXPOSURE	NO. INJ	RATE	NO. INJ	RATE	WKDYS LOST	RATE
1 MONTH	417,700	50	23.94	36	17	366	175
-2 MONTHS	389,501	39	20.03	21	11	227	117
-3 MONTHS	363,282	38	20.92	23	13	243	134
3 MONTHS	1,170,483	127	21.70	80	14	836	143
-6 MONTHS	1,073,723	73	13.60	45	8	394	73
-12 MONTHS	2,074,410	106	10.22	75	7	774	75
-2 YEARS	2,848,501	183	12.85	139	10	1,612	113
-5 YEARS	5,259,217	346	13.16	268	10	2,829	108
-10 YEARS	6,837,967	323	9.45	261	8	3,636	106
10 YEARS	9,801,966	189	3.86	157	3	2,609	53
NKNOWN	774,748	17	4.39	14	4	48	12
TOTAL	29,840,980	1,364	9.14	1,039	7	12,738	85

EXHIBIT 64B

ALL USERS
AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
GROUPED BY EXPERIENCE
* COLLECTION DIVISION *
ACCIDENT TYPE: OVEREXERTION INVOLVING CONT

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

EXPERIENCE GROUP	NO LOST WKDY CASES	OSHA DAYS LOST	AVG WKDYS LOST
< 1 MONTH	36	366	10.17
1-2 MONTHS	21	227	10.81
2-3 MONTHS	23	243	10.57
< 3 MONTHS	80	836	10.45
3-6 MONTHS	45	394	8.76
6-12 MONTHS	75	774	10.32
1-2 YEARS	139	1,612	11.60
2-5 YEARS	268	2,829	10.56
5-10 YEARS	261	3,636	13.93
> 10 YEARS	157	2,609	16.62
UNKNOWN	14	48	3.43
TOTAL	1,039	12,738	12.26

EXHIBIT 64C

ALL USERS
DIRECT COSTS
GROUPED BY EXPERIENCE
* COLLECTION DIVISION *
ACCIDENT TYPE: OVEREXERTION INVOLVING CONT

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED. DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.

AVG DIRECT COST PER OSHA RECORDABLE INJ			DIRECT COST PER MAN YEAR	
EXPERIENCE GROUP	NO. OSHA RECORD INJ	AVG COST	MAN-HRS EXPOSURE	COSTS PER M-Y
< 1 MONTH	50	314	417,700	75
1-2 MONTHS	39	321	389,501	65
2-3 MONTHS	38	369	363,282	77
< 3 MONTHS	127	333	1,170,483	72
3-6 MONTHS	73	272	1,073,723	37
6-12 MONTHS	106	375	2,074,410	38
1-2 YEARS	183	418	2,848,501	54
2-5 YEARS	346	369	5,259,217	49
5-10 YEARS	323	739	6,837,967	70
> 10 YEARS	189	690	9,801,966	27
UNKNOWN	17	132	774,748	6
TOTAL	1,364	497	29,840,980	45

EXHIBIT 65A

ALL USERS
AVERAGE INJURY RATES
BY EXPERIENCE GROUP
* COLLECTION DIVISION *
ACCIDENT TYPE: SLIP ON SAME LEVEL

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

	OSHA INCIDENCE RATE			INCIDENCE RATE - LWC		SEVERITY RAT	
EXPERIENCE GROUP	MAN-HOURS EXPOSURE	NO. INJ	RATE	NO. INJ	RATE	WKDYS LOST	RAT
< 1 MONTH	417,700	13	6.22	4	2	13	
1-2 MONTHS	389,501	12	6.16	9	5	38	2
2-3 MONTHS	363,282	10	5.51	8	4	33	1
< 3 MONTHS	1,170,483	35	5.98	21	4	84	1
3-6 MONTHS	1,073,723	16	2.98	11	2	81	1
6-12 MONTHS	2,074,410	28	2.70	17	2	77	
1-2 YEARS	2,848,501	37	2.60	31	2	329	2
2-5 YEARS	5,259,217	77	2.93	62	2	868	3
5-10 YEARS	6,837,967	91	2.66	66	2	876	2
> 10 YEARS	9,801,966	89	1.82	70	1	1,021	2
UNKNOWN	774,748	5	1.29	3	1	16	
TOTAL	29,840,980	378	2.53	281	2	3,352	2

EXHIBIT 65B

ALL USERS
AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
GROUPED BY EXPERIENCE
* COLLECTION DIVISION *
ACCIDENT TYPE: SLIP ON SAME LEVEL

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

EXPERIENCE GROUP	NO LOST WKDY CASES	OSHA DAYS LOST	AVG WKDYS LOST
< 1 MONTH	4	13	3.25
1-2 MONTHS	9	38	4.22
2-3 MONTHS	8	33	4.12
< 3 MONTHS	21	84	4.00
3-6 MONTHS	11	81	7.36
6-12 MONTHS	17	77	4.53
1-2 YEARS	31	329	10.61
2-5 YEARS	62	868	14.00
5-10 YEARS	66	876	13.27
> 10 YEARS	70	1,021	14.59
UNKNOWN	3	16	5.33
TOTAL	281	3,352	11.93

EXHIBIT 65C

ALL USERS
DIRECT COSTS
GROUPED BY EXPERIENCE
* COLLECTION DIVISION *
ACCIDENT TYPE: SLIP ON SAME LEVEL

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED.
DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.
DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.

AVG DIRECT COST PER OSHA RECORDABLE INJ			DIRECT COST PER MAN YEAR	
EXPERIENCE GROUP	NO. OSHA RECORD INJ	AVG COST	MAN-HRS EXPOSURE	COSTS PER M-Y
< 1 MONTH	13	91	417,700	6
1-2 MONTHS	12	159	389,501	10
2-3 MONTHS	10	146	363,282	8
< 3 MONTHS	35	130	1,170,483	8
3-6 MONTHS	16	188	1,073,723	6
6-12 MONTHS	28	144	2,074,410	4
1-2 YEARS	37	499	2,848,501	13
2-5 YEARS	77	517	5,259,217	15
5-10 YEARS	91	443	6,837,967	12
> 10 YEARS	89	523	9,801,966	10
UNKNOWN	5	128	774,748	2
TOTAL	378	416	29,840,980	11

EXHIBIT 66A

ALL USERS
AVERAGE INJURY RATES
BY EXPERIENCE GROUP
* COLLECTION DIVISION *
ACCIDENT TYPE: STRUCK BY WASTE

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

	OSHA INCIDENCE RATE			INCIDENCE RATE - LWC		SEVERITY RATE	
EXPERIENCE GROUP	MAN-HOURS EXPOSURE	NO. INJ	RATE	NO. INJ	RATE	WKDYS LOST	RATE
< 1 MONTH	417,700	17	8.14	5	2	12	6
1-2 MONTHS	389,501	16	8.22	4	2	11	6
2-3 MONTHS	363,282	10	5.51	3	2	175	96
< 3 MONTHS	1,170,483	43	7.35	12	2	198	34
3-6 MONTHS	1,073,723	12	2.24	5	1	7	1
6-12 MONTHS	2,074,410	39	3.76	9	1	42	4
1-2 YEARS	2,848,501	41	2.88	16	1	81	6
2-5 YEARS	5,259,217	76	2.89	36	1	134	5
5-10 YEARS	6,837,967	81	2.37	35	1	169	5
> 10 YEARS	9,801,966	78	1.59	32	1	236	5
UNKNOWN	774,748	4	1.03	1	0	7	2
TOTAL	29,840,980	374	2.51	146	1	874	6

EXHIBIT 66B

ALL USERS
AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
GROUPED BY EXPERIENCE
* COLLECTION DIVISION *
ACCIDENT TYPE: STRUCK BY WASTE

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

EXPERIENCE GROUP	NO LOST WKDY CASES	OSHA DAYS LOST	AVG WKDYS LOST
< 1 MONTH	5	12	2.40
1-2 MONTHS	4	11	2.75
2-3 MONTHS	3	175	58.33
< 3 MONTHS	12	198	16.50
3-6 MONTHS	5	7	1.40
6-12 MONTHS	9	42	4.67
1-2 YEARS	16	81	5.06
2-5 YEARS	36	134	3.72
5-10 YEARS	35	169	4.83
> 10 YEARS	32	236	7.37
UNKNOWN	1	7	7.00
TOTAL	146	874	5.99

EXHIBIT 66C

ALL USERS
DIRECT COSTS
GROUPED BY EXPERIENCE
* COLLECTION DIVISION *
ACCIDENT TYPE: STRUCK BY WASTE

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED. DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.

AVG DIRECT COST PER OSHA RECORDABLE INJ			DIRECT COST PER MAN YEAR	
EXPERIENCE GROUP	NO. OSHA RECORD INJ	AVG COST	MAN-HRS EXPOSURE	COSTS PER M-Y
< 1 MONTH	17	61	417,700	5
1-2 MONTHS	16	58	389,501	5
2-3 MONTHS	10	766	363,282	42
< 3 MONTHS	43	224	1,170,483	16
3-6 MONTHS	12	65	1,073,723	1
6-12 MONTHS	39	63	2,074,410	2
1-2 YEARS	41	110	2,848,501	3
2-5 YEARS	76	131	5,259,217	4
5-10 YEARS	81	156	6,837,967	4
> 10 YEARS	78	196	9,801,966	3
UNKNOWN	4	702	774,748	7
TOTAL	374	155	29,840,980	4

EXHIBIT 67A

ALL USERS
AVERAGE INJURY RATES
BY EXPERIENCE GROUP
* COLLECTION DIVISION *
ACCIDENT TYPE: FALL ON SAME LEVEL

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

	OSHA INCIDENCE RATE			INCIDENCE RATE - LWC		SEVERITY RATE	
EXPERIENCE GROUP	MAN-HOURS EXPOSURE	NO. INJ	RATE	NO. INJ	RATE	WKDYS LOST	RATE
< 1 MONTH	417,700	13	6.22	7	3	88	4
1-2 MONTHS	389,501	10	5.13	8	4	62	3
2-3 MONTHS	363,282	7	3.85	3	2	56	31
< 3 MONTHS	1,170,483	30	5.13	18	3	206	3
3-6 MONTHS	1,073,723	10	1.86	8	1	24	
6-12 MONTHS	2,074,410	29	2.80	17	2	310	3
1-2 YEARS	2,848,501	35	2.46	21	1	238	1
2-5 YEARS	5,259,217	64	2.43	47	2	600	2
5-10 YEARS	6,837,967	65	1.90	51	1	838	2
> 10 YEARS	9,801,966	99	2.02	75	2	1,095	2
UNKNOWN	774,748	5	1.29	2	1	23	
TOTAL	29,840,980	337	2.26	239	2	3,334	2

EXHIBIT 67B

ALL USERS
AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
GROUPED BY EXPERIENCE
* COLLECTION DIVISION *
ACCIDENT TYPE: FALL ON SAME LEVEL

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

EXPERIENCE GROUP	NO LOST WKDY CASES	OSHA DAYS LOST	AVG WKDYS LOST
< 1 MONTH	7	88	12.57
1-2 MONTHS	8	62	7.75
2-3 MONTHS	3	56	18.67
< 3 MONTHS	18	206	11.44
3-6 MONTHS	8	24	3.00
6-12 MONTHS	17	310	18.24
1-2 YEARS	21	238	11.33
2-5 YEARS	47	600	12.77
5-10 YEARS	51	838	16.43
> 10 YEARS	75	1,095	14.60
UNKNOWN	2	23	11.50
TOTAL	239	3,334	13.95

EXHIBIT 67C

ALL USERS
DIRECT COSTS
GROUPED BY EXPERIENCE
* COLLECTION DIVISION *
ACCIDENT TYPE: FALL ON SAME LEVEL

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED.
DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.
DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.

AVG DIRECT COST PER OSHA RECORDABLE INJ			DIRECT COST PER MAN YEAR	
EXPERIENCE GROUP	NO. OSHA RECORD INJ	AVG COST	MAN-HRS EXPOSURE	COSTS PER M-Y
< 1 MONTH	13	257	417,700	16
1-2 MONTHS	10	199	389,501	10
2-3 MONTHS	7	278	363,282	11
< 3 MONTHS	30	243	1,170,483	13
3-6 MONTHS	10	114	1,073,723	2
6-12 MONTHS	29	494	2,074,410	14
1-2 YEARS	35	353	2,848,501	9
2-5 YEARS	64	476	5,259,217	12
5-10 YEARS	65	610	6,837,967	12
> 10 YEARS	99	554	9,801,966	11
UNKNOWN	5	254	774,748	3
TOTAL	337	479	29,840,980	11

EXHIBIT 68A

ALL USERS
AVERAGE INJURY RATES
BY EXPERIENCE GROUP
* COLLECTION DIVISION *
ACCIDENT TYPE: VEHICLE ACCIDENT

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

	OSHA INCIDENCE RATE			INCIDENCE RATE - LWC		SEVERITY RATE	
EXPERIENCE GROUP	MAN-HOURS EXPOSURE	NO. INJ	RATE	NO. INJ	RATE	WKDYS LOST	RATE
< 1 MONTH	417,700	12	5.75	6	3	116	56
1-2 MONTHS	389,501	6	3.08	5	3	309	159
2-3 MONTHS	363,282	5	2.75	5	3	70	39
< 3 MONTHS	1,170,483	23	3.93	16	3	495	85
3-6 MONTHS	1,073,723	12	2.24	8	1	131	24
6-12 MONTHS	2,074,410	19	1.83	14	1	132	13
-2 YEARS	2,848,501	34	2.39	22	2	430	30
2-5 YEARS	5,259,217	60	2.28	46	2	902	34
5-10 YEARS	6,837,967	52	1.52	41	1	1,185	35
> 10 YEARS	9,801,966	65	1.33	50	1	988	20
UNKNOWN	774,748	4	1.03	3	1	4	1
TOTAL	29,840,980	269	1.80	200	1	4,267	29

EXHIBIT 68B

ALL USERS
AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
GROUPED BY EXPERIENCE
* COLLECTION DIVISION *
ACCIDENT TYPE: VEHICLE ACCIDENT

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

EXPERIENCE GROUP	NO LOST WKDY CASES	OSHA DAYS LOST	AVG WKDYS LOST
< 1 MONTH	6	116	19.33
1-2 MONTHS	5	309	61.80
2-3 MONTHS	5	70	14.00
< 3 MONTHS	16	495	30.94
3-6 MONTHS	8	131	16.37
6-12 MONTHS	14	132	9.43
1-2 YEARS	22	430	19.55
2-5 YEARS	46	902	19.61
5-10 YEARS	41	1,185	28.90
> 10 YEARS	50	988	19.76
UNKNOWN	3	4	1.33
TOTAL	200	4,267	21.33

EXHIBIT 68C

ALL USERS
DIRECT COSTS
GROUPED BY EXPERIENCE
* COLLECTION DIVISION *
ACCIDENT TYPE: VEHICLE ACCIDENT

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED. DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.

AVG DIRECT COST PER OSHA RECORDABLE INJ			DIRECT COST PER MAN YEAR	
EXPERIENCE GROUP	NO. OSHA RECORD INJ	AVG COST	MAN-HRS EXPOSURE	COSTS PER M-Y
< 1 MONTH	12	1,066	417,700	61
1-2 MONTHS	6	1,301	389,501	40
2-3 MONTHS	5	1,032	363,282	28
< 3 MONTHS	23	1,120	1,170,483	44
3-6 MONTHS	12	368	1,073,723	8
6-12 MONTHS	19	211	2,074,410	4
1-2 YEARS	34	1,294	2,848,501	31
2-5 YEARS	60	627	5,259,217	14
5-10 YEARS	52	1,019	6,837,967	16
> 10 YEARS	65	865	9,801,966	12
UNKNOWN	4	86	774,748	1
TOTAL	269	838	29,840,980	15

EXHIBIT 69A

ALL USERS
AVERAGE INJURY RATES
BY HEIGHT GROUP
* COLLECTION DIVISION *
ACCIDENT TYPE: OVEREXERTION INVOLVING CONT

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

HEIGHT GROUP	OSHA INCIDENCE RATE MAN-HOURS EXPOSURE	NO. INJ	RATE	INCIDENCE RATE - LWC NO. INJ	RATE	SEVERITY RAT WKDYS LOST	RAT
< 5'3	775,606	16	4.13	12	3.09	119	31.0
5' 3-5' 4	869,774	40	9.20	29	6.67	522	120.0
5' 5-5' 6	3,378,733	133	7.87	99	5.86	1,123	66.0
5' 7-5' 8	6,101,018	296	9.70	240	7.87	2,811	92.0
5' 9-5'10	6,665,237	291	8.73	224	6.72	2,763	83.0
5'11-6'	6,515,228	319	9.79	233	7.15	2,765	85.0
6' 1-6' 2	3,284,008	181	11.02	130	7.92	1,784	109.0
6' 3-6' 4	906,686	48	10.59	40	8.82	424	94.0
> 6'4	227,356	11	9.68	9	7.92	58	51.0
UNKNOWN	1,192,748	29	4.86	23	3.86	369	62.0
TOTAL	29,916,414	1,364	9.12	1,039	6.95	12,738	85.0

EXHIBIT 69B

ALL USERS
AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
GROUPED BY HEIGHT
* COLLECTION DIVISION *
ACCIDENT TYPE: OVEREXERTION INVOLVING CONT

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

HEIGHT GROUP	NO LOST WKDY CASES	ACTUAL DAYS LOST	AVG WKDYS LOST
< 5'3	12	119	9.92
5' 3-5' 4	29	522	18.00
5' 5-5' 6	99	1,123	11.34
5' 7-5' 8	240	2,811	11.71
5' 9-5'10	224	2,763	12.33
5'11-6'	233	2,765	11.87
6' 1-6' 2	130	1,784	13.72
6' 3-6' 4	40	424	10.60
> 6'4	9	58	6.44
UNKNOWN	23	369	16.04
TOTAL	1,039	12,738	12.26

EXHIBIT 69C

ALL USERS
DIRECT COSTS
GROUPED BY HEIGHT GROUP
* COLLECTION DIVISION *
ACCIDENT TYPE: OVEREXERTION INVOLVING CONT

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.

AVG DIRECT COST PER OSHA RECORDABLE INJ			DIRECT COST PER MAN YEAR	
HEIGHT GROUP	NO. OSHA RECORD INJ	AVG COST	MAN-HRS EXPOSURE	COSTS PER M-Y
< 5'3	16	246	775,606	10
5' 3-5' 4	40	745	869,774	69
5' 5-5' 6	133	946	3,378,733	75
5' 7-5' 8	296	470	6,101,018	46
5' 9-5'10	291	475	6,665,237	42
5'11-6'	319	413	6,515,228	40
6' 1-6' 2	181	407	3,284,008	45
6' 3-6' 4	48	435	906,686	46
> 6'4	11	240	227,356	23
UNKNOWN	29	388	1,192,748	19
TOTAL	1,364	497	29,916,414	45

EXHIBIT 70A

ALL USERS
AVERAGE INJURY RATES
BY HEIGHT GROUP
* COLLECTION DIVISION *
ACCIDENT TYPE: SLIP ON SAME LEVEL

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

HEIGHT GROUP	OSHA INCIDENCE RATE MAN-HOURS EXPOSURE	NO. INJ	RATE	INCIDENCE RATE - LWC NO. INJ	RATE	SEVERITY RATE WKDYS LOST	RATE
< 5'3	775,606	7	2	6	2	50	13
5' 3-5' 4	869,774	4	1	3	1	14	3
5' 5-5' 6	3,378,733	30	2	24	1	301	18
5' 7-5' 8	6,101,018	94	3	69	2	882	29
5' 9-5'10	6,665,237	78	2	60	2	669	20
5'11-6'	6,515,228	93	3	65	2	852	26
6' 1-6' 2	3,284,008	49	3	38	2	388	24
6' 3-6' 4	906,686	10	2	7	2	52	11
> 6'4	227,356	3	3	3	3	52	46
UNKNOWN	1,192,748	10	2	6	1	92	15
TOTAL	29,916,414	378	3	281	2	3,352	22

EXHIBIT 70B

ALL USERS
AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
GROUPED BY HEIGHT
* COLLECTION DIVISION *
ACCIDENT TYPE: SLIP ON SAME LEVEL

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

HEIGHT GROUP	NO LOST WKDY CASES	ACTUAL DAYS LOST	AVG WKDYS LOST
< 5'3	6	50	8.33
5' 3-5' 4	3	14	4.67
5' 5-5' 6	24	301	12.54
5' 7-5' 8	69	882	12.78
5' 9-5'10	60	669	11.15
5'11-6'	65	852	13.11
6' 1-6' 2	38	388	10.21
6' 3-6' 4	7	52	7.43
> 6'4	3	52	17.33
UNKNOWN	6	92	15.33
TOTAL	281	3,352	11.93

EXHIBIT 70C

ALL USERS
DIRECT COSTS
GROUPED BY HEIGHT GROUP
* COLLECTION DIVISION *
ACCIDENT TYPE: SLIP ON SAME LEVEL

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED
DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.
DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.

AVG DIRECT COST PER OSHA RECORDABLE INJ			DIRECT COST PER MAN YEAR	
HEIGHT GROUP	NO. OSHA RECORD INJ	AVG COST	MAN-HRS EXPOSURE	COSTS PER M-Y
< 5'3	7	287	775,606	5
5' 3-5' 4	4	209	869,774	2
5' 5-5' 6	30	551	3,378,733	10
5' 7-5' 8	94	437	6,101,018	13
5' 9-5'10	78	397	6,665,237	9
5'11-6'	93	472	6,515,228	13
6' 1-6' 2	49	274	3,284,008	8
6' 3-6' 4	10	248	906,686	5
> 6'4	3	703	227,356	19
UNKNOWN	10	405	1,192,748	7
TOTAL	378	416	29,916,414	11

EXHIBIT 71A

ALL USERS
AVERAGE INJURY RATES
BY HEIGHT GROUP
* COLLECTION DIVISION *
ACCIDENT TYPE: STRUCK BY WASTE

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

	OSHA INCIDENCE RATE			INCIDENCE RATE - LWC		SEVERITY RATE	
HEIGHT GROUP	MAN-HOURS EXPOSURE	NO. INJ	RATE	NO. INJ	RATE	WKDYS LOST	RATE
< 5'3	775,606	4	1	3	1	176	45
5' 3-5' 4	869,774	13	3	6	1	45	10
5' 5-5' 6	3,378,733	37	2	16	1	94	6
5' 7-5' 8	6,101,018	85	3	29	1	109	4
5' 9-5'10	6,665,237	90	3	38	1	161	5
5'11-6'	6,515,228	84	3	32	1	176	5
6' 1-6' 2	3,284,008	31	2	14	1	68	4
6' 3-6' 4	906,686	10	2	2	0	3	1
> 6'4	227,356	5	4	1	1	9	8
UNKNOWN	1,192,748	15	3	5	1	33	6
TOTAL	29,916,414	374	3	146	1	874	6

EXHIBIT 71B

ALL USERS
AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
GROUPED BY HEIGHT
* COLLECTION DIVISION *
ACCIDENT TYPE: STRUCK BY WASTE

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

HEIGHT GROUP	NO LOST WKDY CASES	ACTUAL DAYS LOST	AVG WKDYS LOST
< 5'3	3	176	58.67
5' 3-5' 4	6	45	7.50
5' 5-5' 6	16	94	5.87
5' 7-5' 8	29	109	3.76
5' 9-5'10	38	161	4.24
5'11-6'	32	176	5.50
6' 1-6' 2	14	68	4.86
6' 3-6' 4	2	3	1.50
> 6'4	1	9	9.00
UNKNOWN	5	33	6.60
TOTAL	146	874	5.99

EXHIBIT 71C

ALL USERS
DIRECT COSTS
GROUPED BY HEIGHT GROUP
* COLLECTION DIVISION *
ACCIDENT TYPE: STRUCK BY WASTE

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED
DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.
DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.

AVG DIRECT COST PER OSHA RECORDABLE INJ			DIRECT COST PER MAN YEAR	
HEIGHT GROUP	NO. OSHA RECORD INJ	AVG COST	MAN-HRS EXPOSURE	COSTS PER M-Y
< 5'3	4	1,839	775,606	19
5' 3-5' 4	13	251	869,774	8
5' 5-5' 6	37	245	3,378,733	5
5' 7-5' 8	85	85	6,101,018	2
5' 9-5'10	90	120	6,665,237	3
5'11-6'	84	143	6,515,228	4
6' 1-6' 2	31	158	3,284,008	3
6' 3-6' 4	10	45	906,686	1
> 6'4	5	213	227,356	9
UNKNOWN	15	126	1,192,748	3
TOTAL	374	155	29,916,414	4

EXHIBIT 72A

ALL USERS
AVERAGE INJURY RATES
BY HEIGHT GROUP
* COLLECTION DIVISION *
ACCIDENT TYPE: FALL ON SAME LEVEL

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

	OSHA INCIDENCE RATE			INCIDENCE RATE - LWC		SEVERITY RATE	
HEIGHT GROUP	MAN-HOURS EXPOSURE	NO. INJ	RATE	NO. INJ	RATE	WKDYS LOST	RATE
< 5'3	775,606	6	2	6	2	113	29
5' 3-5' 4	869,774	7	2	6	1	121	28
5' 5-5' 6	3,378,733	30	2	21	1	321	19
5' 7-5' 8	6,101,018	78	3	57	2	972	32
5' 9-5'10	6,665,237	71	2	54	2	651	20
5'11-6'	6,515,228	74	2	50	2	607	19
6' 1-6' 2	3,284,008	35	2	24	1	290	18
6' 3-6' 4	906,686	13	3	7	2	75	17
> 6'4	227,356	3	3	2	2	8	7
UNKNOWN	1,192,748	20	3	12	2	176	30
TOTAL	29,916,414	337	2	239	2	3,334	22

EXHIBIT 72B

ALL USERS
AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
GROUPED BY HEIGHT
* COLLECTION DIVISION *
ACCIDENT TYPE: FALL ON SAME LEVEL

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

HEIGHT GROUP	NO LOST WKDY CASES	ACTUAL DAYS LOST	AVG WKDYS LOST
< 5'3	6	113	18.83
5' 3-5' 4	6	121	20.17
5' 5-5' 6	21	321	15.29
5' 7-5' 8	57	972	17.05
5' 9-5'10	54	651	12.06
5'11-6'	50	607	12.14
6' 1-6' 2	24	290	12.08
6' 3-6' 4	7	75	10.71
> 6'4	2	8	4.00
UNKNOWN	12	176	14.67
TOTAL	239	3,334	13.95

EXHIBIT 72C

ALL USERS
DIRECT COSTS
GROUPED BY HEIGHT GROUP
* COLLECTION DIVISION *
ACCIDENT TYPE: FALL ON SAME LEVEL

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.

AVG DIRECT COST PER OSHA RECORDABLE INJ			DIRECT COST PER MAN YEAR	
HEIGHT GROUP	NO. OSHA RECORD INJ	AVG COST	MAN-HRS EXPOSURE	COSTS PER M-Y
< 5'3	6	641	775,606	10
5' 3-5' 4	7	629	869,774	10
5' 5-5' 6	30	460	3,378,733	8
5' 7-5' 8	78	551	6,101,018	14
5' 9-5'10	71	457	6,665,237	10
5'11-6'	74	491	6,515,228	11
6' 1-6' 2	35	381	3,284,008	8
6' 3-6' 4	13	250	906,686	7
> 6'4	3	96	227,356	3
UNKNOWN	20	535	1,192,748	18
TOTAL	337	479	29,916,414	11

EXHIBIT 73A

ALL USERS
AVERAGE INJURY RATES
BY HEIGHT GROUP
* COLLECTION DIVISION *
ACCIDENT TYPE: VEHICLE ACCIDENT

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000
ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

	OSHA INCIDENCE RATE			INCIDENCE RATE - LWC		SEVERITY R	
HEIGHT GROUP	MAN-HOURS EXPOSURE	NO. INJ	RATE	NO. INJ	RATE	WKDYS LOST	R
< 5'3	775,606	7	2	6	2	146	
5' 3-5' 4	869,774	11	3	10	2	227	
5' 5-5' 6	3,378,733	32	2	23	1	466	
5' 7-5' 8	6,101,018	50	2	32	1	578	
5' 9-5'10	6,665,237	52	2	42	1	1,218	
5'11-6'	6,515,228	50	2	40	1	720	
6' 1-6' 2	3,284,008	39	2	29	2	564	
6' 3-6' 4	906,686	12	3	10	2	308	
> 6'4	227,356	1	1	0	0	0	
UNKNOWN	1,192,748	15	3	8	1	40	
TOTAL	29,916,414	269	2	200	1	4,267	

EXHIBIT 73B

ALL USERS
AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
GROUPED BY HEIGHT
* COLLECTION DIVISION *
ACCIDENT TYPE: VEHICLE ACCIDENT

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

HEIGHT GROUP	NO LOST WKDY CASES	ACTUAL DAYS LOST	AVG WKDYS LOST
< 5'3	6	146	24.33
5' 3-5' 4	10	227	22.70
5' 5-5' 6	23	466	20.26
5' 7-5' 8	32	578	18.06
5' 9-5'10	42	1,218	29.00
5'11-6'	40	720	18.00
6' 1-6' 2	29	564	19.45
6' 3-6' 4	10	308	30.80
> 6'4	0	0	0.00
UNKNOWN	8	40	5.00
TOTAL	200	4,267	21.33

EXHIBIT 73C

ALL USERS
DIRECT COSTS
GROUPED BY HEIGHT GROUP
* COLLECTION DIVISION *
ACCIDENT TYPE: VEHICLE ACCIDENT

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.

AVG DIRECT COST PER OSHA RECORDABLE INJ			DIRECT COST PER MAN YEAR	
HEIGHT GROUP	NO. OSHA RECORD INJ	AVG COST	MAN-HRS EXPOSURE	COSTS PER M-Y
< 5'3	7	723	775,606	13
5' 3-5' 4	11	829	869,774	21
5' 5-5' 6	32	482	3,378,733	9
5' 7-5' 8	50	948	6,101,018	16
5' 9-5'10	52	1,28	6,665,237	20
5'11-6'	50	724	6,515,228	11
6' 1-6' 2	39	674	3,284,008	16
6' 3-6' 4	12	1,378	906,686	36
> 6'4	1	35	227,356	0
UNKNOWN	15	146	1,192,748	4
TOTAL	269	838	29,916,414	15

EXHIBIT 74A

ALL USERS
AVERAGE INJURY RATES
BY WEIGHT GROUP
* COLLECTION DIVISION *
ACCIDENT TYPE: OVEREXERTION INVOLVING CONT

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

	OSHA INCIDENCE RATE			INCIDENCE RATE - LWC		SEVERITY RATE	
WEIGHT GROUP	MAN-HOURS EXPOSURE	NO. INJ	RATE	NO. INJ	RATE	WKDYS LOST	RATE
< 130 LBS	377,986	16	8.47	13	7	126	67
130-139 LBS	1,081,416	50	9.25	34	6	480	89
140-149 LBS	2,339,807	118	10.09	91	8	1,050	90
150-159 LBS	3,495,856	150	8.58	117	7	1,293	74
160-169 LBS	4,527,019	234	10.34	166	7	1,970	87
170-179 LBS	4,181,272	223	10.67	178	9	2,082	100
180-189 LBS	3,864,063	172	8.90	133	7	1,580	82
190-199 LBS	2,697,086	115	8.53	89	7	1,382	102
200-209 LBS	2,215,959	86	7.76	60	5	735	66
210-219 LBS	1,439,150	66	9.17	51	7	787	109
220-229 LBS	1,017,267	48	9.44	38	7	330	65
230-239 LBS	544,712	25	9.18	20	7	253	93
240-249 LBS	433,058	13	6.00	9	4	173	80
> 249 LBS	630,684	24	7.61	20	6	147	47
UNKNOWN	1,080,137	24	4.44	20	4	350	65
TOTAL	29,925,454	1,364	9.12	1,039	7	12,738	85

EXHIBIT 74B

ALL USERS
AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
GROUPED BY WEIGHT
* COLLECTION DIVISION *
ACCIDENT TYPE: OVEREXERTION INVOLVING CONT

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

WEIGHT GROUP	NO LOST WKDY CASES	OSHA DAYS LOST	AVG WKDYS LOST
< 130 LBS	1	4	4.00
130-139 LBS	8	70	8.75
140-149 LBS	17	134	7.88
150-159 LBS	20	156	7.80
160-169 LBS	32	265	8.28
170-179 LBS	29	148	5.10
180-189 LBS	20	142	7.10
190-199 LBS	14	239	17.07
200-209 LBS	5	28	5.60
210-219 LBS	15	158	10.53
220-229 LBS	3	25	8.33
230-239 LBS	3	21	7.00
240-249 LBS	1	5	5.00
> 249 LBS	4	40	10.00
UNKNOWN	2	19	9.50
TOTAL	174	1,454	8.36

EXHIBIT 74C

ALL USERS
DIRECT COSTS
GROUPED BY WEIGHT GROUP
* COLLECTION DIVISION *
ACCIDENT TYPE: OVEREXERTION INVOLVING CONT

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.

AVG DIRECT COST PER OSHA RECORDABLE INJ			DIRECT COST PER MAN YEAR	
WEIGHT GROUP	NO OSHA RECORD INJ	AVG COST	MAN-HRS EXPOSURE	COSTS PER M-Y
< 130 LBS	16	402	377,986	34
130-139 LBS	50	363	1,081,416	34
140-149 LBS	118	471	2,339,807	47
150-159 LBS	150	355	3,495,856	31
160-169 LBS	234	777	4,527,019	80
170-179 LBS	223	468	4,181,272	50
180-189 LBS	172	466	3,864,063	42
190-199 LBS	115	540	2,697,086	46
200-209 LBS	86	382	2,215,959	30
210-219 LBS	66	540	1,439,150	50
220-229 LBS	48	293	1,017,267	28
230-239 LBS	25	337	544,712	31
240-249 LBS	13	561	433,058	34
> 249 LBS	24	286	630,684	22
UNKNOWN	24	423	1,080,137	19
TOTAL	1,364	497	29,925,454	45

EXHIBIT 75A

ALL USERS
AVERAGE INJURY RATES
BY WEIGHT GROUP
* COLLECTION DIVISION *
ACCIDENT TYPE: SLIP ON SAME LEVEL

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

	OSHA INCIDENCE RATE			INCIDENCE RATE - LWC		SEVERITY RATE	
WEIGHT GROUP	MAN-HOURS EXPOSURE	NO. INJ	RATE	NO. INJ	RATE	WKDYS LOST	RATE
< 130 LBS	377,986	1	0.53	1	1	11	6
130-139 LBS	1,081,416	14	2.59	7	1	50	9
140-149 LBS	2,339,807	27	2.31	15	1	330	28
150-159 LBS	3,495,856	48	2.75	37	2	512	29
160-169 LBS	4,527,019	37	1.63	27	1	317	14
170-179 LBS	4,181,272	48	2.30	36	2	405	19
180-189 LBS	3,864,063	58	3.00	45	2	466	24
190-199 LBS	2,697,086	34	2.52	26	2	265	20
200-209 LBS	2,215,959	33	2.98	27	2	331	30
210-219 LBS	1,439,150	20	2.78	15	2	143	20
220-229 LBS	1,017,267	20	3.93	16	3	239	47
230-239 LBS	544,712	11	4.04	9	3	66	24
240-249 LBS	433,058	8	3.69	5	2	23	11
> 249 LBS	630,684	10	3.17	8	3	101	32
UNKNOWN	1,080,137	9	1.67	7	1	93	17
TOTAL	29,925,454	378	2.53	281	2	3,352	22

EXHIBIT 75B

ALL USERS
AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
GROUPED BY WEIGHT
* COLLECTION DIVISION *
ACCIDENT TYPE: SLIP ON SAME LEVEL

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

WEIGHT GROUP	NO LOST WKDY CASES	OSHA DAYS LOST	AVG WKDYS LOST
< 130 LBS	0	0	0.00
130-139 LBS	1	8	8.00
140-149 LBS	2	19	9.50
150-159 LBS	5	53	10.60
160-169 LBS	4	57	14.25
170-179 LBS	2	8	4.00
180-189 LBS	8	60	7.50
190-199 LBS	4	49	12.25
200-209 LBS	2	14	7.00
210-219 LBS	2	4	2.00
220-229 LBS	1	5	5.00
230-239 LBS	0	0	0.00
240-249 LBS	1	3	3.00
> 249 LBS	2	27	13.50
UNKNOWN	1	1	1.00
TOTAL	35	308	8.80

EXHIBIT 75C

ALL USERS
DIRECT COSTS
GROUPED BY WEIGHT GROUP
* COLLECTION DIVISION *
ACCIDENT TYPE: SLIP ON SAME LEVEL

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.
DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.

AVG DIRECT COST PER OSHA RECORDABLE INJ			DIRECT COST PER MAN YEAR	
WEIGHT GROUP	NO OSHA RECORD INJ	AVG COST	MAN-HRS EXPOSURE	COSTS PER M-Y
< 130 LBS	1	389	377,986	2
130-139 LBS	14	168	1,081,416	4
140-149 LBS	27	687	2,339,807	16
150-159 LBS	48	481	3,495,856	13
160-169 LBS	37	427	4,527,019	7
170-179 LBS	48	422	4,181,272	10
180-189 LBS	58	381	3,864,063	11
190-199 LBS	34	289	2,697,086	7
200-209 LBS	33	350	2,215,959	10
210-219 LBS	20	346	1,439,150	10
220-229 LBS	20	669	1,017,267	26
230-239 LBS	11	280	544,712	11
240-249 LBS	8	113	433,058	4
> 249 LBS	10	512	630,684	16
UNKNOWN	9	457	1,080,137	8
TOTAL	378	416	29,925,454	11

EXHIBIT 76A

ALL USERS
AVERAGE INJURY RATES
BY WEIGHT GROUP
* COLLECTION DIVISION *
ACCIDENT TYPE: STRUCK BY WASTE

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

	OSHA INCIDENCE RATE			INCIDENCE RATE - LWC		SEVERITY RATE	
WEIGHT GROUP	MAN-HOURS EXPOSURE	NO. INJ	RATE	NO. INJ	RATE	WKDYS LOST	RATE
< 130 LBS	377,986	5	2.65	1	1	7	4
130-139 LBS	1,081,416	15	2.77	7	1	14	3
140-149 LBS	2,339,807	25	2.14	14	1	60	5
150-159 LBS	3,495,856	50	2.86	22	1	92	5
160-169 LBS	4,527,019	68	3.00	33	1	161	7
170-179 LBS	4,181,272	54	2.58	19	1	140	7
180-189 LBS	3,864,063	57	2.95	15	1	57	3
190-199 LBS	2,697,086	24	1.78	10	1	238	18
200-209 LBS	2,215,959	20	1.81	10	1	24	2
210-219 LBS	1,439,150	12	1.67	2	0	5	1
220-229 LBS	1,017,267	12	2.36	2	0	2	0
230-239 LBS	544,712	3	1.10	1	0	8	3
240-249 LBS	433,058	7	3.23	3	1	13	6
> 249 LBS	630,684	9	2.85	3	1	22	7
UNKNOWN	1,080,137	13	2.41	4	1	31	6
TOTAL	29,925,454	374	2.50	146	1	874	6

EXHIBIT 76B

ALL USERS
AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
GROUPED BY WEIGHT
* COLLECTION DIVISION *
ACCIDENT TYPE: STRUCK BY WASTE

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

WEIGHT GROUP	NO LOST WKDY CASES	OSHA DAYS LOST	AVG WKDYS LOST
< 130 LBS	0	0	0.00
130-139 LBS	0	0	0.00
140-149 LBS	3	4	1.33
150-159 LBS	5	17	3.40
160-169 LBS	5	29	5.80
170-179 LBS	4	27	6.75
180-189 LBS	3	4	1.33
190-199 LBS	2	4	2.00
200-209 LBS	0	0	0.00
210-219 LBS	0	0	0.00
220-229 LBS	0	0	0.00
230-239 LBS	1	8	8.00
240-249 LBS	0	0	0.00
> 249 LBS	0	0	0.00
TOTAL	23	93	4.04

EXHIBIT 76C

ALL USERS
DIRECT COSTS
GROUPED BY WEIGHT GROUP
* COLLECTION DIVISION *
ACCIDENT TYPE: STRUCK BY WASTE

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.

AVG DIRECT COST PER OSHA RECORDABLE INJ			DIRECT COST PER MAN YEAR	
WEIGHT GROUP	NO OSHA RECORD INJ	AVG COST	MAN-HRS EXPOSURE	COSTS PER M-Y
< 130 LBS	5	577	377,986	15
130-139 LBS	15	81	1,081,416	3
140-149 LBS	25	115	2,339,807	3
150-159 LBS	50	133	3,495,856	4
160-169 LBS	68	153	4,527,019	5
170-179 LBS	54	167	4,181,272	4
180-189 LBS	57	82	3,864,063	2
190-199 LBS	24	523	2,697,086	9
200-209 LBS	20	88	2,215,959	2
210-219 LBS	12	83	1,439,150	1
220-229 LBS	12	52	1,017,267	1
230-239 LBS	3	142	544,712	2
240-249 LBS	7	124	433,058	4
> 249 LBS	9	142	630,684	4
UNKNOWN	13	135	1,080,137	3
TOTAL	374	155	29,925,454	4

EXHIBIT 77A

ALL USERS
AVERAGE INJURY RATES
BY WEIGHT GROUP
* COLLECTION DIVISION *
ACCIDENT TYPE: FALL ON SAME LEVEL

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

	OSHA INCIDENCE RATE			INCIDENCE RATE - LWC		SEVERITY RATE	
WEIGHT GROUP	MAN-HOURS EXPOSURE	NO. INJ	RATE	NO. INJ	RATE	WKDYS LOST	RATE
< 130 LBS	377,986	4	2.12	3	2	50	26
130-139 LBS	1,081,416	17	3.14	13	2	161	30
140-149 LBS	2,339,807	17	1.45	11	1	161	14
150-159 LBS	3,495,856	43	2.46	26	1	259	15
160-169 LBS	4,527,019	34	1.50	23	1	370	16
170-179 LBS	4,181,272	55	2.63	41	2	493	24
180-189 LBS	3,864,063	50	2.59	37	2	472	24
190-199 LBS	2,697,086	19	1.41	14	1	384	28
200-209 LBS	2,215,959	24	2.17	20	2	367	33
210-219 LBS	1,439,150	14	1.95	8	1	105	15
220-229 LBS	1,017,267	18	3.54	14	3	157	31
230-239 LBS	544,712	4	1.47	4	1	40	15
240-249 LBS	433,058	9	4.16	7	3	114	53
> 249 LBS	630,684	11	3.49	7	2	98	31
UNKNOWN	1,080,137	18	3.33	11	2	103	19
TOTAL	29,925,454	337	2.25	239	2	3,334	22

EXHIBIT 77B

ALL USERS
AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
GROUPED BY WEIGHT
* COLLECTION DIVISION *
ACCIDENT TYPE: FALL ON SAME LEVEL

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

WEIGHT GROUP	NO LOST WKDY CASES	OSHA DAYS LOST	AVG WKDYS LOST
< 130 LBS	1	33	33.00
130-139 LBS	3	34	11.33
140-149 LBS	3	45	15.00
150-159 LBS	2	5	2.50
160-169 LBS	2	128	64.00
170-179 LBS	2	7	3.50
180-189 LBS	3	31	10.33
190-199 LBS	3	94	31.33
200-209 LBS	3	43	14.33
210-219 LBS	0	0	0.00
220-229 LBS	1	2	2.00
230-239 LBS	0	0	0.00
240-249 LBS	1	2	2.00
> 249 LBS	0	0	0.00
UNKNOWN	1	3	3.00
TOTAL	25	427	17.08

EXHIBIT 77C

ALL USERS
DIRECT COSTS
GROUPED BY WEIGHT GROUP
* COLLECTION DIVISION *
ACCIDENT TYPE: FALL ON SAME LEVEL

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.

AVG DIRECT COST PER OSHA RECORDABLE INJ			DIRECT COST PER MAN YEAR	
WEIGHT GROUP	NO OSHA RECORD INJ	AVG COST	MAN-HRS EXPOSURE	COSTS PER M-Y
< 130 LBS	4	412	377,986	9
130-139 LBS	17	398	1,081,416	13
140-149 LBS	17	448	2,339,807	7
150-159 LBS	43	320	3,495,856	8
160-169 LBS	34	580	4,527,019	9
170-179 LBS	55	472	4,181,272	13
180-189 LBS	50	446	3,864,063	12
190-199 LBS	19	979	2,697,086	14
200-209 LBS	24	491	2,215,959	11
210-219 LBS	14	317	1,439,150	6
220-229 LBS	18	488	1,017,267	17
230-239 LBS	4	351	544,712	5
240-249 LBS	9	730	433,058	30
> 249 LBS	11	290	630,684	10
UNKNOWN	18	488	1,080,137	16
TOTAL	337	479	29,925,454	11

EXHIBIT 78A

ALL USERS
AVERAGE INJURY RATES
BY WEIGHT GROUP
* COLLECTION DIVISION *
ACCIDENT TYPE: VEHICLE ACCIDENT

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: OSHA INCIDENCE RATE = (NUMBER OF OSHA RECORDABLE CASES / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF CASES PER 100 FULL TIME EMPLOYEES PER YEAR. DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.
SEVERITY RATE = (NUMBER OF WORKDAYS LOST / MAN-HOURS EXPOSURE) X 200,000.
ROUGHLY EQUIVALENT TO THE NUMBER OF WORKDAYS LOST PER 100 FULL TIME EMPLOYEES PER YEAR.

	OSHA INCIDENCE RATE			INCIDENCE RATE - LWC		SEVERITY RATE	
WEIGHT GROUP	MAN-HOURS EXPOSURE	NO. INJ	RATE	NO. INJ	RATE	WKDYS LOST	RATE
< 130 LBS	377,986	3	1.59	3	2	24	13
130-139 LBS	1,081,416	10	1.85	9	2	117	22
140-149 LBS	2,339,807	27	2.31	18	2	370	32
150-159 LBS	3,495,856	37	2.12	26	1	370	21
160-169 LBS	4,527,019	39	1.72	28	1	661	29
170-179 LBS	4,181,272	37	1.77	26	1	677	32
180-189 LBS	3,864,063	34	1.76	29	2	640	33
190-199 LBS	2,697,086	17	1.26	14	1	271	20
200-209 LBS	2,215,959	18	1.62	12	1	561	51
210-219 LBS	1,439,150	14	1.95	13	2	269	37
220-229 LBS	1,017,267	5	0.98	4	1	82	16
230-239 LBS	544,712	5	1.84	3	1	7	3
240-249 LBS	433,058	2	0.92	2	1	15	7
> 249 LBS	630,684	10	3.17	6	2	150	48
UNKNOWN	1,080,137	11	2.04	7	1	53	10
TOTAL	29,925,454	269	1.80	200	1	4,267	29

EXHIBIT 78B

ALL USERS
AVERAGE WORKDAYS LOST PER LOST WORKDAY CASE
GROUPED BY WEIGHT
* COLLECTION DIVISION *
ACCIDENT TYPE: VEHICLE ACCIDENT

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

WEIGHT GROUP	NO LOST WKDY CASES	OSHA DAYS LOST	AVG WKDYS LOST
< 130 LBS	0	0	0.00
130-139 LBS	6	89	14.83
140-149 LBS	2	31	15.50
150-159 LBS	5	51	10.20
160-169 LBS	1	10	10.00
170-179 LBS	3	102	34.00
180-189 LBS	3	13	4.33
190-199 LBS	2	13	6.50
200-209 LBS	3	15	5.00
210-219 LBS	4	13	3.25
220-229 LBS	1	46	46.00
230-239 LBS	0	0	0.00
240-249 LBS	1	5	5.00
> 249 LBS	1	17	17.00
UNKNOWN	1	12	12.00
TOTAL	33	417	12.64

EXHIBIT 78C

ALL USERS
DIRECT COSTS
GROUPED BY WEIGHT GROUP
* COLLECTION DIVISION *
ACCIDENT TYPE: VEHICLE ACCIDENT

REPORTING PERIOD: DECEMBER 1975 - SEPTEMBER 1977

DEFINITIONS: DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKMEN'S COMPENSATION BENEFITS, AND WAGE CONTINUATION BENEFITS (E.G. INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED
DIRECT COSTS PER MAN-YEAR IS THE COST PER FULL-TIME SANITATION EMPLOYEE PER YEAR BASED ON 2,000 HOURS PER YEAR.
DOES NOT INCLUDE FIRST AID INJURIES. DOES INCLUDE MEDICAL TREATMENT, LOST TIME, PERMANENT DISABILITY AND FATALITY CASES.

AVG DIRECT COST PER OSHA RECORDABLE INJ			DIRECT COST PER MAN YEAR	
WEIGHT GROUP	NO OSHA RECORD INJ	AVG COST	MAN-HRS EXPOSURE	COSTS PER M-Y
< 130 LBS	3	335	377,986	5
130-139 LBS	10	477	1,081,416	9
140-149 LBS	27	609	2,339,807	14
150-159 LBS	37	380	3,495,856	8
160-169 LBS	39	765	4,527,019	13
170-179 LBS	37	1,002	4,181,272	18
180-189 LBS	34	1,036	3,864,063	18
190-199 LBS	17	824	2,697,086	10
200-209 LBS	18	1,216	2,215,959	20
210-219 LBS	14	2,513	1,439,150	49
220-229 LBS	5	830	1,017,267	8
230-239 LBS	5	129	544,712	2
240-249 LBS	2	444	433,058	4
> 249 LBS	10	716	630,684	23
UNKNOWN	11	274	1,080,137	6
TOTAL	269	838	29,925,454	15

EXHIBIT 79A

ALL USERS
ACTIVITIES RANKED FROM HIGHEST TO LOWEST PERCENT OF OSHA RECORDABLE INJURIES
FIELD TEST INJURIES

REPORTING PERIOD: JULY 1973 - SEPTEMBER 1975

DEFINITIONS: OSHA RECORDABLE CASES INCLUDE MEDICAL TREATMENT CASES (I.E. NON-FATAL CASES WITHOUT LOST WORKDAYS), LOST WORKDAY, PERMANENT DISABILITY AND FATAL CASES. FIRST AID INJURIES ARE NOT INCLUDE

	OSHA RECORDABLE INJURIES	
ACTIVITY	NO.	%
LIFTING CONTAINER	208	13.79
DUMPING CONTAINER	171	11.34
CARRYING CONTAINER	143	9.48
STANDING OR WALKING	110	7.29
GETTING OFF EQUIP	101	6.70
RIDING ON EQUIP	85	5.64
GETTING ON EQUIP	73	4.84
DRIVING EQUIP	62	4.11
PUSHING OR PULLING CONTAINER	47	3.12
LIFTING TO DUMP CONTAINER	47	3.12
LIFTING WASTE	44	2.92
CLEARING WASTE W HANDTOOL	38	2.52
OPERATING CONTROLS	34	2.25
REFUELING VEH OR ROUTINE MAINT	32	2.12
DOING OTHER TYPE OF ACTIVITY	24	1.59
DUMPING WASTE	21	1.39
LIFTING OBJECT	20	1.33
PUSHING OR PULLING OBJECT	19	1.26
LIFTING TO DUMP WASTE	16	1.06
PUSHING OR PULLING WASTE	15	0.99
OPENING EQUIP PT	15	0.99
PUSHING OR PULLING VEH PT	14	0.93
REPAIRING EQUIP W HANDTOOL	14	0.93
DOING UNK ACTIVITY	13	0.86
DIRECTING VEH	12	0.80
CARRYING WASTE	10	0.66
COMPACTING WASTE IN CONT	10	0.66
EMPTYING VEH	10	0.66
DOING REPETITIOUS WORK	10	0.66
WASHING EQUIP	9	0.60
DOING NO ONE ACTIVITY	8	0.53
PICKING UP LOOSE WASTE	7	0.46
COMPACTING WASTE IN VEH	6	0.40
HOOKING OR UNHOOKING EQUIP	6	0.40
CLOSING EQUIP PT	6	0.40
CHECKING EQUIP MALFNCTN	6	0.40
CARRYING OBJECT	5	0.33
DOING JANITORIAL WORK	5	0.33

OSHA RECORDABLE INJURIES ACTIVITY	NO.	%
SHAKING TO DUMP CONT	4	0.27
LIFTING VEH PART	3	0.20
CATCHING CONT	3	0.20
HOOKING OR UNHOOKING CONT	3	0.20
TRIMMING SHRUBBERY	3	0.20
PUTTING OUT FIRE	3	0.20
ARRANGING LOAD	2	0.13
DOING OFFICE WORK	2	0.13
DOING HORSEPLAY	2	0.13
RUNNING	2	0.13
MOWING	2	0.13
DISLODGING WASTE FROM VEH	1	0.07
DUMPING OBJECT	1	0.07
REPAIRING CONT W HANDTOOL	1	0.07
TOTAL	1,508	100.00

EXHIBIT 79B

ALL USERS
ACTIVITIES RANKED FROM HIGHEST TO LOWEST
PERCENT OF OSHA DAYS LOST
FIELD TEST INJURIES

REPORTING PERIOD: JULY 1973 - SEPTEMBER 1975

DEFINITIONS: A LOST DAYS CASE IS ONE IN WHICH THE EMPLOYEE INCURRED WORKDAYS LOST AND/OR LIGHT DUTY DAYS DUE TO THE ACCIDENT.

	OSHA DAYS LOST		
ACTIVITY	NO.	%	AVG DAYS LOST/ LOST DAYS CASE
LIFTING CONTAINER	1,428	14.03	10.35
DUMPING CONTAINER	940	9.24	10.80
CARRYING CONTAINER	867	8.52	8.85
STANDING OR WALKING	771	7.58	12.24
OPERATING CONTROLS	733	7.20	45.81
GETTING OFF EQUIP	677	6.65	10.75
DRIVING EQUIP	612	6.01	17.49
RIDING ON EQUIP	562	5.52	10.81
GETTING ON EQUIP	544	5.35	11.57
COMPACTING WASTE IN VEH	461	4.53	92.20
DOING REPETITIOUS WORK	346	3.40	86.50
LIFTING TO DUMP CONTAINER	289	2.84	10.32
PUSHING OR PULLING CONTAINER	260	2.56	8.97
DOING OTHER TYPE OF ACTIVITY	256	2.52	18.29
PUSHING OR PULLING VEH PT	226	2.22	22.60
SHAKING TO DUMP CONT	95	0.93	31.67
DUMPING WASTE	90	0.88	8.18
WASHING EQUIP	82	0.81	13.67
LIFTING WASTE	78	0.77	6.00
DOING NO ONE ACTIVITY	75	0.74	15.00
HOOKING OR UNHOOKING CONT	69	0.68	23.00
REFUELING VEH OR ROUTINE MAINT	59	0.58	6.56
DOING JANITORIAL WORK	57	0.56	14.25
RUNNING	54	0.53	27.00
PUSHING OR PULLING OBJECT	51	0.50	5.10
LIFTING OBJECT	50	0.49	8.33
DOING OFFICE WORK	50	0.49	50.00
CARRYING WASTE	42	0.41	8.40
CLEARING WASTE W HANDTOOL	40	0.39	4.44
LIFTING TO DUMP WASTE	36	0.35	4.00
OPENING EQUIP PT	36	0.35	4.50
COMPACTING WASTE IN CONT	33	0.32	16.50
HOOKING OR UNHOOKING EQUIP	27	0.27	5.40
PUSHING OR PULLING WASTE	24	0.24	4.00
DIRECTING VEH	23	0.23	5.75
PICKING UP LOOSE WASTE	21	0.21	21.00
EMPTYING VEH	20	0.20	6.67
REPAIRING CONT W HANDTOOL	20	0.20	20.00

OSHA DAYS LOST

ACTIVITY	NO.	%	AVG DAYS LOST/ LOST DAYS CASE
LIFTING VEH PART	14	0.14	7.00
CARRYING OBJECT	12	0.12	3.00
CHECKING EQUIP MALFNCTN	12	0.12	4.00
DOING UNK ACTIVITY	10	0.10	2.50
REPAIRING EQUIP W HANDTOOL	8	0.08	2.00
PUTTING OUT FIRE	7	0.07	3.50
CLOSING EQUIP PT	6	0.06	3.00
CATCHING CONT	2	0.02	2.00
TOTAL	10,175	100.00	12.16

EXHIBIT 79C

ALL USERS
ACTIVITIES RANKED FROM HIGHEST TO LOWEST
PERCENT OF DIRECT COSTS
FIELD TEST INJURIES
REPORTING PERIOD: JULY 1973 - SEPTEMBER 1975

DEFINITIONS: OSHA RECORDABLE CASES INCLUDE MEDICAL TREATMENT CASES (I.E. NON-FATAL CASES WITHOUT LOST WORKDAYS), AND LOST WORKDAY, PERMANENT DISABILITY AND FATALITY CASES.
FIRST AID INJURIES ARE NOT INCLUDED.
DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKER'S COMPENSATION BENEFITS AND WAGE CONTINUATION BENEFITS (E.G., INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED.

DIRECT COSTS

ACTIVITY	AMT.	%	AVG COSTS/ OSHA REC INJ
LIFTING CONTAINER	83,779	12.07	403
RIDING ON EQUIP	71,017	10.23	835
DRIVING EQUIP	69,746	10.05	1,125
CARRYING CONTAINER	61,861	8.91	433
DUMPING CONTAINER	57,670	8.31	337
DIRECTING VEH	56,945	8.21	4,745
GETTING OFF EQUIP	41,195	5.94	408
STANDING OR WALKING	36,347	5.24	330
GETTING ON EQUIP	32,092	4.62	440
COMPACTING WASTE IN VEH	27,168	3.91	4,528
DOING OTHER TYPE OF ACTIVITY	21,432	3.09	893
OPERATING CONTROLS	18,458	2.66	543
PUSHING OR PULLING VEH PT	16,004	2.31	1,143
DOING REPETITIOUS WORK	15,671	2.26	1,567
PUSHING OR PULLING CONTAINER	15,010	2.16	319
LIFTING TO DUMP CONTAINER	9,409	1.36	200
WASHING EQUIP	5,726	0.83	636
DUMPING WASTE	5,027	0.72	239
HOOKING OR UNHOOKING CONT	5,027	0.72	1,676
LIFTING WASTE	4,440	0.64	101
REFUELING VEH OR ROUTINE MAINT	3,200	0.46	100
DOING JANITORIAL WORK	3,112	0.45	622
OPENING EQUIP PT	2,677	0.39	178
CLEARING WASTE W HANDTOOL	2,615	0.38	69
PUSHING OR PULLING OBJECT	2,394	0.34	126
RUNNING	2,307	0.33	1,154
DOING OFFICE WORK	2,301	0.33	1,151
LIFTING OBJECT	2,145	0.31	107
COMPACTING WASTE IN CONT	2,120	0.31	212
DOING NO ONE ACTIVITY	1,936	0.28	242
SHAKING TO DUMP CONT	1,814	0.26	454
LIFTING TO DUMP WASTE	1,486	0.21	93
HOOKING OR UNHOOKING EQUIP	1,471	0.21	245
EMPTYING VEH	1,453	0.21	145
PUSHING OR PULLING WASTE	1,337	0.19	89
CARRYING WASTE	1,277	0.18	128

ACTIVITY	DIRECT COSTS AMT.	%	AVG COSTS/ OSHA REC INJ
LIFTING VEH PART	958	0.14	319
DOING UNK ACTIVITY	875	0.13	67
REPAIRING EQUIP W HANDTOOL	801	0.12	57
REPAIRING CONT W HANDTOOL	781	0.11	781
PICKING UP LOOSE WASTE	589	0.08	84
CARRYING OBJECT	551	0.08	110
CHECKING EQUIP MALFNCTN	475	0.07	79
CLOSING EQUIP PT	444	0.06	74
CATCHING CONT	249	0.04	83
PUTTING OUT FIRE	214	0.03	71
MOWING	162	0.02	81
DOING HORSEPLAY	89	0.01	45
TRIMMING SHRUBBERY	49	0.01	16
ARRANGING LOAD	40	0.01	20
DUMPING OBJECT	20	0.00	20
DISLODGING WASTE FROM VEH	15	0.00	15
TOTAL	693,981	100.00	460

EXHIBIT 80A

ALL USERS
ACCIDENT TYPES RANKED FROM HIGHEST TO LOWEST
PERCENT OF OSHA RECORDABLE INJURIES
FIELD TEST INJURIES
REPORTING PERIOD: JULY 1973 - SEPTEMBER 1975

DEFINITIONS: OSHA RECORDABLE CASES INCLUDE MEDICAL TREATMENT CASES (I.E. NON-FATAL CASES WITHOUT LOST WORKDAYS), LOST WORKDAY, PERMANENT DISABILITY AND FATAL CASES. FIRST AID INJURIES ARE NOT INCLUDED.

	OSHA RECORDABLE INJURIES	
ACCIDENT TYPE	NO.	%
OVEREXERTION INVOLVING CONT	184	12.20
FALL ON SAME LEVEL	108	7.16
FALL TO A DIFFERENT LEVEL	92	6.10
STRUCK SELF WITH CONT BEING HANDLED	78	5.17
WASTE PARTICLES IN EYE	75	4.97
STRUCK BY WASTE	73	4.84
CAUGHT BETWEEN OBJECTS	70	4.64
VEHICLE ACCIDENT	54	3.58
VEH MOVEMENT INVOLVED ACCIDENT	52	3.45
HURT BY HANDLING CONT	50	3.32
SLIP ON SAME LEVEL	47	3.12
INSECT BITE	43	2.85
STEPPED ON SHARP WASTE	39	2.59
STRUCK AGAINST VEH PART	36	2.39
STRUCK AGAINST OBJECT	31	2.06
STRUCK BY CONTAINER	29	1.92
SLIP AND STRUCK AGAINST VEH PART	26	1.72
HURT BY HANDLING WASTE	24	1.59
ANIMAL BITE	24	1.59
STRUCK SELF WITH OBJ BEING HANDLED	23	1.53
FALL AGAINST VEH PART	23	1.53
OVEREXERTION INVOLVING OBJ	23	1.53
BODILY REACTION	22	1.46
STRUCK SELF WITH WASTE BEING HANDLED	21	1.39
PARTICLES IN EYE	21	1.39
DEVELOPED INJURY OVER TIME	19	1.26
STRUCK BY OBJ	17	1.13
OVEREXERTION INVOLVING WASTE	17	1.13
STRUCK BY VEH PART	14	0.93
HURT BY HANDLING OBJ	14	0.93
OVEREXERTION	14	0.93
STRUCK AGAINST WASTE	12	0.80
HURT BY HANDLING VEH PART	11	0.73
CONTACT WITH ALLERGENIC WASTE	11	0.73
OTHER ACCIDENT TYPE	11	0.73
STRUCK AGAINST CONTAINER	10	0.66
FALL AGAINST OBJ	10	0.66
OVEREXERTION INVOLVING VEH PART	8	0.53
CONTACT WITH CAUSTIC OR TOXIC WASTE	8	0.53
CONTACT WITH HOT SUBSTANCE	8	0.53

OSHA RECORDABLE INJURIES

ACCIDENT TYPE	NO.	%
UNKNOWN ACCIDENT TYPE	8	0.53
STRUCK SELF WITH VEH PT BEING HANDLED	6	0.40
SLIP TO A DIFFERENT LEVEL	6	0.40
CONTACT WITH CAUSTIC OR TOXIC SUBSTANCE	6	0.40
FALL AGAINST CONT	5	0.33
SLIP AND STRUCK AGAINST OBJ	4	0.27
BODILY REACTION IN CATCHING CONT	4	0.27
RESULT OF AGGRESSIVE ACT	4	0.27
EXPOSURE TO WEATHER EXTREMES	2	0.13
CONTACT WITH HOT VEH PART	2	0.13
STEPPED ON SHARP OBJ	2	0.13
SLIP AND STRUCK AGAINST CONT	1	0.07
SLIP AND STRUCK AGAINST WASTE	1	0.07
BODILY REACTION IN CATCHING WASTE	1	0.07
BODILY REACTION IN AVOIDING VEH	1	0.07
BODILY REACTION IN AVOIDING OBJ	1	0.07
BODILY REACTION IN AVOIDING CONT	1	0.07
BODILY REACTION IN AVOIDING WASTE	1	0.07
TOTAL	1,508	100.00

EXHIBIT 80B

ALL USERS
ACCIDENT TYPES RANKED FROM HIGHEST TO LOWEST
PERCENT OF OSHA DAYS LOST
FIELD TEST INJURIES
REPORTION PERIOD: JULY 1973 - SEPTEMBER 1975

DEFINITIONS: A LOST DAYS CASE IS ONE IN WHICH THE EMPLOYEE INCURRED WORKDAYS LOST AND/OR LIGHT DUTY DAYS DUE TO THE ACCIDENT.

ACCIDENT TYPE	OSHA DAYS LOST		
	NO.	%	AVG DAYS LOST/ LOST DAYS CASE
OVEREXERTION INVOLVING CONT	1,712	16.83	12.23
CAUGHT BETWEEN OBJECTS	1,624	15.96	37.77
FALL ON SAME LEVEL	1,026	10.08	13.68
VEHICLE ACCIDENT	742	7.29	20.61
FALL TO A DIFFERENT LEVEL	691	6.79	12.12
STRUCK BY CONTAINER	529	5.20	31.12
STRUCK BY VEH PART	508	4.99	50.80
STRUCK SELF WITH CONT BEING HANDLED	338	3.32	8.45
VEH MOVEMENT INVOLVED ACCIDENT	328	3.22	9.37
DEVELOPED INJURY OVER TIME	269	2.64	20.69
SLIP ON SAME LEVEL	258	2.54	6.62
OVEREXERTION	254	2.50	50.80
STRUCK BY WASTE	185	1.82	6.38
FALL AGAINST VEH PART	150	1.47	10.00
STRUCK AGAINST VEH PART	132	1.30	6.60
SLIP AND STRUCK AGAINST VEH PART	109	1.07	6.81
OVEREXERTION INVOLVING OBJ	94	0.92	5.87
BODILY REACTION	82	0.81	5.12
OVEREXERTION INVOLVING VEH PART	79	0.78	13.17
STRUCK AGAINST OBJECT	78	0.77	4.87
OVEREXERTION INVOLVING WASTE	77	0.76	6.42
FALL AGAINST CONT	73	0.72	24.33
OTHER ACCIDENT TYPE	65	0.64	16.25
HURT BY HANDLING CONT	63	0.62	3.50
WASTE PARTICLES IN EYE	58	0.57	2.15
STRUCK BY OBJ	57	0.56	9.50
HURT BY HANDLING WASTE	56	0.55	9.33
STRUCK SELF WITH WASTE BEING HANDLED	55	0.54	6.11
FALL AGAINST OBJ	52	0.51	10.40
BODILY REACTION IN AVOIDING VEH	46	0.45	46.00
STRUCK AGAINST WASTE	44	0.43	7.33
STEPPED ON SHARP WASTE	36	0.35	3.60
INSECT BITE	31	0.30	2.38
STRUCK SELF WITH OBJ BEING HANDLED	30	0.29	5.00
BODILY REACTION IN CATCHING CONT	27	0.27	9.00
CONTACT WITH HOT SUBSTANCE	26	0.26	6.50
STRUCK AGAINST CONTAINER	21	0.21	4.20
SLIP TO A DIFFERENT LEVEL	21	0.21	5.25
PARTICLES IN EYE	20	0.20	2.50
CONTACT WITH CAUSTIC OR TOXIC SUBSTANCE	20	0.20	4.00
ANIMAL BITE	19	0.19	2.71
HURT BY HANDLING VEH PART	16	0.16	5.33

OSHA DAYS LOST

ACCIDENT TYPE	NO.	%	AVG DAYS LOST/ LOST DAYS CASE
UNKNOWN ACCIDENT TYPE	15	0.15	3.75
CONTACT WITH ALLERGENIC WASTE	10	0.10	2.00
HURT BY HANDLING OBJ	9	0.09	4.50
SLIP AND STRUCK AGAINST OBJ	9	0.09	3.00
CONTACT WITH CAUSTIC OR TOXIC WASTE	9	0.09	2.25
STRUCK SELF WITH VEH PT BEING HANDLED	5	0.05	1.67
SLIP AND STRUCK AGAINST CONT	4	0.04	4.00
BODILY REACTION IN AVOIDING CONT	3	0.03	3.00
CONTACT WITH HOT VEH PART	3	0.03	3.00
SLIP AND STRUCK AGAINST WASTE	2	0.02	2.00
BODILY REACTION IN CATCHING WASTE	2	0.02	2.00
EXPOSURE TO WEATHER EXTREMES	2	0.02	2.00
RESULT OF AGGRESSIVE ACT	1	0.01	1.00
TOTAL	10,175	100.00	12.16

EXHIBIT 80C

ALL USERS
ACCIDENT TYPES RANKED FROM HIGHEST TO LOWEST
PERCENT OF DIRECT COSTS
FIELD TEST INJURIES

REPORTING PERIOD: JULY 1973 - SEPTEMBER 1975

DEFINITIONS: OSHA RECORDABLE CASES INCLUDE MEDICAL TREATMENT CASES (I.E. NON-FATAL CASES WITHOUT LOST WORKDAYS), AND LOST WORKDAY, PERMANENT DISABILITY AND FATAL CASES. FIRST AID INJURIES ARE NOT INCLUDED. DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKER'S COMPENSATION BENEFITS AND WAGE CONTINUATION BENEFITS (E.G., INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED.

ACCIDENT TYPE	DIRECT COSTS AMOUNT	%	AVG COSTS/ OSHA REC INJ
CAUGHT BETWEEN OBJECTS	176,838	25.48	2,526
OVEREXERTION INVOLVING CONT	96,325	13.88	524
VEHICLE ACCIDENT	79,484	11.45	1,472
FALL ON SAME LEVEL	68,683	9.90	636
FALL TO A DIFFERENT LEVEL	49,832	7.18	542
VEH MOVEMENT INVOLVED ACCIDENT	37,406	5.39	719
STRUCK SELF WITH CONT BEING HANDLED	19,100	2.75	245
STRUCK BY CONTAINER	16,123	2.32	556
SLIP ON SAME LEVEL	13,726	1.98	292
STRUCK BY WASTE	12,568	1.81	172
OVEREXERTION	12,234	1.76	874
DEVELOPED INJURY OVER TIME	11,277	1.62	594
FALL AGAINST VEH PART	8,802	1.27	383
STRUCK AGAINST VEH PART	7,513	1.08	209
STRUCK BY VEH PART	5,747	0.83	411
OVEREXERTION INVOLVING WASTE	5,554	0.80	327
STRUCK AGAINST OBJECT	5,343	0.77	172
FALL AGAINST CONT	4,677	0.67	935
WASTE PARTICLES IN EYE	4,386	0.63	58
HURT BY HANDLING CONT	4,330	0.62	87
BODILY REACTION	3,685	0.53	168
SLIP AND STRUCK AGAINST VEH PART	3,607	0.52	139
STRUCK BY OBJ	3,543	0.51	208
OTHER ACCIDENT TYPE	3,337	0.48	303
FALL AGAINST OBJ	3,285	0.47	329
OVEREXERTION INVOLVING OBJ	3,249	0.47	141
OVEREXERTION INVOLVING VEH PART	2,933	0.42	367
STRUCK AGAINST WASTE	2,557	0.37	213
INSECT BITE	2,173	0.31	51
HURT BY HANDLING WASTE	2,160	0.31	90
STRUCK SELF WITH OBJ BEING HANDLED	2,091	0.30	91
STEPPED ON SHARP WASTE	2,030	0.29	52
HURT BY HANDLING VEH PART	1,919	0.28	174
BODILY REACTION IN AVOIDING VEH	1,877	0.27	1,877
STRUCK SELF WITH WASTE BEING HANDLED	1,740	0.25	83
BODILY REACTION IN CATCHING CONT	1,656	0.24	414

	DIRECT COSTS		
ACCIDENT TYPE	AMOUNT	%	AVG COSTS/ OSHA REC INJ
ANIMAL BITE	1,552	0.22	65
SLIP TO A DIFFERENT LEVEL	1,346	0.19	224
STRUCK AGAINST CONTAINER	1,271	0.18	127
PARTICLES IN EYE	1,258	0.18	60
UNKNOWN ACCIDENT TYPE	1,084	0.16	136
CONTACT WITH HOT SUBSTANCE	1,032	0.15	129
HURT BY HANDLING OBJ	887	0.13	63
CONTACT WITH CAUSTIC OR TOXIC SUBSTANCE	771	0.11	129
CONTACT WITH CAUSTIC OR TOXIC WASTE	627	0.09	78
CONTACT WITH ALLERGENIC WASTE	589	0.08	54
STRUCK SELF WITH VEH PT BEING HANDLED	286	0.04	48
SLIP AND STRUCK AGAINST OBJ	285	0.04	71
SLIP AND STRUCK AGAINST CONT	202	0.03	202
CONTACT WITH HOT VEH PART	191	0.03	96
BODILY REACTION IN AVOIDING CONT	173	0.02	173
BODILY REACTION IN CATCHING WASTE	148	0.02	148
RESULT OF AGGRESSIVE ACT	144	0.02	36
EXPOSURE TO WEATHER EXTREMES	132	0.02	66
SLIP AND STRUCK AGAINST WASTE	118	0.02	118
STEPPED ON SHARP OBJ	55	0.01	28
BODILY REACTION IN AVOIDING OBJ	20	0.00	20
BODILY REACTION IN AVOIDING WASTE	20	0.00	20
TOTAL	693,981	100.00	460

EXHIBIT 81A

ALL USERS
INJURY TYPES RANKED FROM HIGHEST TO LOWEST
PERCENT OF OSHA RECORDABLE INJURIES
FIELD TEST INJURIES

REPORTING PERIOD: JULY 1973 - SEPTEMBER 1975

DEFINITIONS: OSHA RECORDABLE CASES INCLUDE MEDICAL TREATMENT CASES (I.E. NON-FATAL CASES WITHOUT LOST WORKDAYS), LOST WORKDAY, PERMANENT DISABILITY AND FATAL CASES. FIRST AID INJURIES ARE NOT INCLUDED.

	OSHA RECORDABLE INJURIES	
TYPE OF INJURY	NO.	%
SPRAIN OR STRAIN	536	35.54
CUT/PUNCTURE	296	19.63
BRUISE	261	17.31
IRRITATION	123	8.16
MULTIPLE INJURIES	67	4.44
STING	43	2.85
ABRASIONS	40	2.65
FRACTURE	37	2.45
UNKNOWN TYPE OF INJURY	18	1.19
CHEMICAL BURN	15	0.99
DERMATITIS	14	0.93
BURN FROM HEAT	11	0.73
AMPUTATION	9	0.60
OTHER TYPE OF INJURY	7	0.46
INFECTION	6	0.40
INFLAMMATION OF THE JOINTS	6	0.40
POISONING OR ALLERGIC REACTION	4	0.27
HERNIA	3	0.20
AVULSION	2	0.13
DISLOCATION	2	0.13
HEART ATTACK	2	0.13
ASPHYXIATION OR DROWNING	1	0.07
CONCUSSION	1	0.07
CONTAGIOUS DISEASE	1	0.07
HEARING IMPAIRMENT	1	0.07
NOSEBLEED	1	0.07
HEAT STROKE,EXHAUSTION OR CRAMPS	1	0.07
TOTAL	1,508	100.00

EXHIBIT 81B

ALL USERS
INJURY TYPES RANKED FROM HIGHEST TO LOWEST
PERCENT OF OSHA DAYS LOST
FIELD TEST INJURIES

REPORTING PERIOD: JULY 1973 - SEPTEMBER 1975

DEFINITIONS: A LOST DAYS CASE IS ONE IN WHICH THE EMPLOYEE INCURRED WORKDAYS LOST AND/OR LIGHT DUTY DAYS DUE TO THE ACCIDENT.

	OSHA DAYS LOST		
TYPE OF INJURY	NO.	%	AVG DAYS LOST/ LOST DAYS CASE
SPRAIN OR STRAIN	4,185	41.13	11.16
BRUISE	1,458	14.33	10.20
FRACTURE	1,443	14.18	45.09
AMPUTATION	864	8.49	96.00
MULTIPLE INJURIES	738	7.25	17.16
CUT/PUNCTURE	582	5.72	5.60
DISLOCATION	199	1.96	199.00
IRRITATION	151	1.48	3.21
CHEMICAL BURN	92	0.90	9.20
HEART ATTACK	80	0.79	40.00
ABRASIONS	76	0.75	5.07
INFLAMMATION OF THE JOINTS	73	0.72	14.60
UNKNOWN TYPE OF INJURY	58	0.57	5.80
BURN FROM HEAT	48	0.47	9.60
HERNIA	29	0.29	14.50
STING	22	0.22	1.69
POISONING OR ALLERGIC REACTION	19	0.19	4.75
DERMATITIS	18	0.18	3.60
OTHER TYPE OF INJURY	16	0.16	4.00
INFECTION	10	0.10	2.50
ASPHYXIATION OR DROWNING	5	0.05	5.00
CONCUSSION	4	0.04	4.00
AVULSION	3	0.03	3.00
CONTAGIOUS DISEASE	2	0.02	2.00
TOTAL	10,175	100.00	12.16

EXHIBIT 81C

ALL USERS
INJURY TYPES RANKED FROM HIGHEST TO LOWEST
PERCENT OF DIRECT COSTS
FIELD TEST INJURIES
REPORTING PERIOD: JULY 1973 - SEPTEMBER 1975

DEFINITIONS: OSHA RECORDABLE CASES INCLUDE MEDICAL TREATMENT CASES (I.E. NON-FATAL CASES WITHOUT LOST WORKDAYS), AND LOST WORKDAY, PERMANENT DISABILITY AND FATALITY CASES.
FIRST AID INJURIES ARE NOT INCLUDED.
DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKER'S COMPENSATION BENEFITS AND WAGE CONTINUATION BENEFITS (E.G., INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED.

TYPE OF INJURY	DIRECT COSTS AMT.	%	AVG COSTS/ OSHA REC INJ
SPRAIN OR STRAIN	282,345	40.68	527
BRUISE	112,326	16.19	430
MULTIPLE INJURIES	85,922	12.38	1,282
FRACTURE	85,199	12.28	2,303
AMPUTATION	51,997	7.49	5,777
CUT/PUNCTURE	29,457	4.24	100
IRRITATION	9,515	1.37	77
CHEMICAL BURN	6,760	0.97	451
DISLOCATION	6,242	0.90	3,121
ABRASIONS	4,899	0.71	122
INFLAMMATION OF THE JOINTS	3,767	0.54	628
UNKNOWN TYPE OF INJURY	3,012	0.43	167
HEART ATTACK	2,410	0.35	1,205
DERMATITIS	1,905	0.27	136
STING	1,799	0.26	42
BURN FROM HEAT	1,576	0.23	143
OTHER TYPE OF INJURY	1,396	0.20	199
HERNIA	1,304	0.19	435
POISONING OR ALLERGIC REACTION	773	0.11	193
INFECTION	701	0.10	117
ASPHYXIATION OR DROWNING	266	0.04	266
CONCUSSION	167	0.02	167
CONTAGIOUS DISEASE	120	0.02	120
AVULSION	61	0.01	30
NOSEBLEED	30	0.00	30
HEARING IMPAIRMENT	20	0.00	20
HEAT STROKE,EXHAUSTION OR CRAMPS	12	0.00	12
TOTAL	693,981	100.00	460

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FIGURE 82

ALL USERS
PARTS OF BODY INJURED RANKED FROM HIGHEST TO LOWEST PERCENT OF OSHA RECORDABLE INJURIES, WORKDAYS LOST AND DIRECT COSTS

REPORTING PERIOD: JULY 1973 - SEPTEMBER 1975

DEFINITIONS: OSHA RECORDABLE CASES INCLUDE MEDICAL TREATMENT CASES (I.E. NON-FATAL CASES WITHOUT LOST WORKDAYS), LOST WORKDAY, PERMANENT DISABILITY AND FATALITY CASES. FIRST AID INJURIES ARE NOT INCLUDED.
DIRECT COSTS INCLUDE MEDICAL EXPENSES, WORKER'S COMPENSATION BENEFITS AND WAGE CONTINUATION BENEFITS (E.G., INJURY LEAVE) ONLY. INDIRECT COSTS ARE NOT INCLUDED.

OSHA RECORDABLE INJURIES			OSHA DAYS LOST				DIRECT COSTS			
PART OF BODY	OSHA REC INJ NO.	OSHA REC INJ %	PART OF BODY	DAYS LOST NO.	DAYS LOST %	AVG/LOST DAYS CASE	PART OF BODY	DIRECT COSTS AMT.	DIRECT COSTS %	AVG COSTS/ OSHA REC INJ
BACK	234	15.52	MULTIPLE BODY PARTS	2,409	23.68	21.13	MULTIPLE BODY PARTS	178,881	25.78	1,016
MULTIPLE BODY PARTS	176	11.67	BACK	2,357	23.16	13.39	BACK	152,592	21.99	652
EYES	142	9.42	FINGERS	894	8.79	17.19	UNK BODY PART	55,764	8.04	27,802
FINGERS	117	7.76	HAND	814	8.00	23.94	HAND	50,009	7.21	562
LEG	97	6.43	KNEE	729	7.16	12.15	CHEST	35,738	5.15	760
KNEE	93	6.17	TOES	480	4.72	60.00	FINGERS	34,980	5.04	299
HAND	89	5.90	ANKLE	419	4.12	7.48	KNEE	33,701	4.86	362
FOOT	82	5.44	WRIST	362	3.56	11.31	TOES	26,106	3.76	1,740
ANKLE	75	4.97	CHEST	321	3.15	10.35	ANKLE	24,102	3.47	321
ARM	65	4.31	LEG	213	2.09	4.84	WRIST	20,925	3.02	510
CHEST	47	3.12	ABDOMEN	208	2.04	13.00	ABDOMEN	14,356	2.07	574
SHOULDER	45	2.98	EYES	167	1.64	2.98	LEG	10,716	1.54	110
WRIST	41	2.72	FOOT	150	1.47	4.17	EYES	10,567	1.52	74
ELBOW	36	2.39	SHOULDER	132	1.30	4.40	SHOULDER	9,720	1.40	216
ABDOMEN	25	1.66	ARM	121	1.19	4.32	FOOT	7,027	1.01	86
SCALP	21	1.39	ELBOW	115	1.13	7.19	ARM	6,230	0.90	96
GROIN	20	1.33	GROIN	103	1.01	9.36	ELBOW	5,863	0.84	163
NECK	16	1.06	THUMB	86	0.85	21.50	GROIN	5,647	0.81	282
TOES	15	0.99	NECK	25	0.25	3.12	THUMB	3,467	0.50	495
HIPS	9	0.60	HIPS	22	0.22	4.40	NECK	1,601	0.23	100
MOUTH	7	0.46	FACE	11	0.11	5.50	SCALP	1,280	0.18	61
FOREHEAD	7	0.46	SCALP	8	0.08	1.60	HIPS	1,234	0.18	137
THUMB	7	0.46	MOUTH	8	0.08	2.67	FACE	897	0.13	149
SKULL	6	0.40	SKULL	7	0.07	3.50	SKULL	526	0.08	88
FACE	6	0.40	UNK BODY PART	4	0.04	4.00	MOUTH	454	0.07	65
CHEEK	6	0.40	JAW	3	0.03	1.50	EARS	319	0.05	53
EARS	6	0.40	INTERNAL ORGANS	3	0.03	1.50	CHEEK	251	0.04	42
BUTTOCKS	4	0.27	HEAD	2	0.02	2.00	INTERNAL ORGANS	228	0.03	76
JAW	3	0.20	CHEEK	1	0.01	1.00	FOREHEAD	194	0.03	28
INTERNAL ORGANS	3	0.20	FOREHEAD	1	0.01	1.00	JAW	165	0.02	55
NOSE	2	0.13	TOTAL	10,175	100.00	12.16	BUTTOCKS	152	0.02	38
UNK BODY PART	2	0.13					TRUNK	96	0.01	96
OTHER BODY PART	2	0.13					HEAD	82	0.01	82
HEAD	1	0.07					NOSE	58	0.01	29
TRUNK	1	0.07					OTHER BODY PART	53	0.01	26
TOTAL	1,508	100.00					TOTAL	693,781	100.00	460

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